Isaac Hays

Pathology Jno Sommer 1810

Pathology all John Sommer

Gentlemen Gentlemen, Hitherto we have J. Sommer 1810

Hetherto, we have considered

the living body in a healthy state.

Such as divines consider man before his

fall; but now we will consider him

in an imperfect or diseased state —

Sickness and death as moral evil are

the consequences of the perfection of

primeval innocence, which when lost

are followed by these effects, every el-

ement in nature took part with the

creator & construed with him ~~against~~

against man. —

Their action however was but feeble ~~at~~ first.

as we find by the age of some who lived

to almost 1000 years; & it was not till

after the deluge that the life of man

was shortened to the present age: the

influence of wh. together with the

atmosphere combined to produce the shortness of life.—

That life is a forced state, is no less consonant to physiology than to religion.— Life consists in the strife or temporary victory over the causes which produce death. Let us not suppose that the creator delights in the misery of his creatures; to see from this being the case, that all diseases are blessings in disguise: they are necessary to our general good & happiness, they are of important uses. They naturally lead us to studies highly important to the human race.—

1st Diseases ~~[illegible]~~ rendered it necessary for man to apply himself to the study of anatomy.—

2d They lead us to the study & and knowledge of Physiology.—

3d To the study of nature, the animal, vegetable, and fossil kingdoms; without which the works of nature would ~~would~~ remain

unexplained, unexplored, & unadmired.—

4th To the study of the human mind, which furnishes us with exercises for the moral faculties.— For, without diseases, there would be no charity, neither would there be any Hospitals to relieve the indigent.—

5th and 6th as darkness gives charms to light, in like manner disease is necessary to impart a relish for health.—

7th It serves to increase our moral virtues for many owe their virtue to a spell of sickness.—

8th It reconciles us to death, & induces us to console ourselves under afflictions for the loss of our friends.— In entering on pathology I am without a guide, Boerhaave notions & observations are short & not suited to the present improved state of medicine. I ambition attempts to bring it into a system are so full of ~~humorous~~ humorous doctrine that they are of little or no service.

to Students of the present day.—

Pathology treats of the causes, effects, seats, & signs of disease. They may be divided into four

1 Remote.

2 Predisposing.

3 Occasional or exciting. &

4 Proximate or (Ipse morbus) they are all links of one chain, for instance, in inflamatory Fever

1st cold is the remote cause

2d The produced by cold it is the predisposing cause

3d Act the occasional or exciting cause &

4th the convulsive or morbid excitement of the arterial System the proximate cause.—

By the Proximate cause, I mean the Morbus Ipse of Cullen. Debility is the predisposing cause of all general diseases, whether they be natural or acquired by natural debility. ~~Debility~~ I mean a predisposition brought into the world with us

+ But I object to the term temperament
1 Because it places disease in the
mind 2d By sanguineous the ~~dis~~ pre-
disposition is placed in the fluids or
blood and not the arteries 3 Bilious
places predisposition in the bile
influence of the Liver 4th The Melan-
cholic places predisposition
in disease
By predisposition I mean ~~a~~
a debility with an accum-
ulated acetability

~~III~~ The arterial is accompanied
with large lungs

This debility is always attended with more or less irritability.

The temperaments are divided by the ancients into four, as

1st Sanguineous
2d Bilious
3rd Phlegmatic
4th Melancholic +

But I shall divide them into ~~seven~~ 9

1st Arterial ++
2d Hepatic
3d Nervous
4th Muscular
5th Phrenetic
6th Alimentary
7 Cutaneous
8 ~~Bilious~~ Cephalic
9 ~~Phlegmatic~~ Lymphatic

1st Arterial
2d Hepatic
3 Nervous
4th Muscular
5th Cephalic
6th Phrenetic
7th Alimentary
8th Lymphatic
9th Cutaneous

The arterial and bilious are often blended together, and predispose to acute diseases especially in warm climates.

When there is an excess of blood or bile in these two. The Arterial is divided into three the Pulmonary, ~~aorta~~ aortic, & Uterine.—

The nervous into three as it effects

nerves, muscles, or mind.—

This Predisposition disposes to Hysteria, Hypochondriasis, Mania, or Epilepsy.—

The Muscular is accompanied with little sensibility and great irritability. Persons afflicted with it are unable to remain long in one place, and must either be riding or walking past, and may be said only to repose in activity; they also possess little mind and often succumb under diseases because the nerves refuse to act as centrals to the system.—

The Phrenetic is accompanied by irritability of the brain and quick perception.— when the blood vessels ~~when the~~ & nerves are healthy there is no disease & vise versa.

Persons afflicted with this Predisposition may be said to be all mind.—

The Alimentary may be divided into Gastric, and intestinal. They dis pose to diseases of that canal and are connected with bilious.—

2 The Phlegmatic the organs of generation are weak and ~~[illegible]~~ inert and the Gymnastics languid.—

Persons of the same age, at the same exercise, on the same day, may be affected with different diseases according ~~as~~ their different Predispositions dispose to different affections.—

1st the different Predispositions are often blended together in different Proportions, for no one predisposition belongs exclusively to one Person.—

2 These Predispositions succeed each other in different periods of life, and in different seasons. ~~of the year~~ Thus Arterial in the Spring, the bilious in the Summer, the phlegmatic in the winter.—

3 They are seldom absent, if a person be born without them he will soon acquire one or more of them.—

4th They descend to families, but are changed mixed and lost by intermarriage.—

6thly Some nations lose their Predisposition, by the admission of intermarriages with other nations. The Predispositions shd never be lost sight of in investigating diseases & prescribing for them, e.g. more depletion by V.S. in the arterial than in any other Pred, and more cathartics in bilious, abstraction from study in the Phrenetic; & few men live in a perfect state of health.— All live in a Pred to disease. Perfect health, is as rare as perfect virtue, & perfect reason. I have said that debility is the Predisposing cause of all diseases for further information on this head see vol. 1 Med. Eng.—

2 That debility is succeeded by ~~excess~~ increase of excitability.—

3 Debility whether local or general invites to morbid action, this to disease; for the electric fluid does not with more ~~certainly~~. certainty attract

or invite the electrine fluid than debility invites disease. —

4th Disease as I have before observed consists in the confused and irregular operations of disordered and debilitated nature, or in the convulsive or morbid action of the internal System, but not in its excessive action as in running Jumping Dancing &c —

5th — Diseases are always partial, I know of no disease which invades every part of the System, in fever it is confined to the blood Vessels, in mania to the Brain, in dysentery to the intestines; &c the art of healing therefore consists in equalizing the System not in removing debility as Dr Brown has said. The remote and exciting causes of disease are often blended together, & act at the same time also the exciting & predisposing; a cause may be remote predisposing, and occasion

[illegible]

Q. Did you see the defendant Lewis Hon Delaney
[illegible] Dickens? —

A. Dickens & I have before observed con-
sist in the confused manner & irregular ob-
servance of their laws & are obliged to come,
& in the commencing a regular system
of the Indians system, but rest in it
becomes rather so in running throughout
[illegible] &c. —

Q. Dickens are always perfect, I have
[illegible] no Dickens which is made every part
of the system, in fact it is confused
[illegible] the Head Chiefs & persons to the
[illegible] in [illegible] to the [illegible]
&c. the art of teaching their [illegible]
in explaining the system not in
removing [illegible] & [illegible] to the
[illegible] manner in & [illegible] [illegible]
Dickens in after [illegible] together &
[illegible] the [illegible] [illegible] &
on [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]

al or exciting, at the same time all diseases depend upon the predisposing debility; which is of two kinds direct and indirect according to Dr Brown, but I prefer the terms debility from action and abstraction; in elucidation of which we will fix the healthy point at 50 upon a scale.

Then if the system be raised 10 degrees or to 60. this is debility from action but if stimulus be abstracted and the system descend to 40 this is debility from abstraction —

When stimuli are long continued debility may be induced, and disease, this may be termed ~~disease~~ disorder; debility is an unit, depression is also an unit, absence of

necessary for the accumulation of

of a security, or the form this of
the case defined under the general
power liability which is of two
kind, first an absolute one being
to be chosen, but I apply the term
liability from action and the term
in abstract of which we will give the
liability point at 70 years a table.

Then if the system be raised 10 degree or
to 80 the liability from action but
if thereby be substituted and the
system lowered to 60 this is liability
from abstract ——

When thereby an long continuing
liability may be in the and the same
the may be turned ~~[illegible]~~ the order
liability is an unit difference is also
an unit, above of

necessary for the accumulation of

of morbid excitement. There are frequently days, weeks, and even years, between debility and morbid action produced by it; disease always attacks the weakest part of the system Pars Dolens habit —

There is but one fever, but one disease, throughout the world
That is morbid excitement or an irregular action of the arterial system.
You see, I differ from Brown in my Principles. Brown makes debility a disease, but I make it one of the causes of disease. The following may be considered as a chain, in wh are contained all the grades & links.
1st from debility to death viz debility from Predisposition.
2d Preternatural excitement —
3d Depression

of morbid sentiment. Men are frequently so long, weak, or even sick, between health and morbid action. Disease is not the natural part of the system. Men are healthy.

There is but one law, but one life, through out the world.

That is morbid sentiment or an irregular action of the natural life. Men are. Little from Heaven or the wilder. Heaven makes health. The disease, but makes it our of the course of his life.

Men may be convalescent or relapse. Just as we turned the page in from health to sickness. Men disease. Disease is not the health.

1 Determined sentiment.

2 Heaven

4th Action of an irritant
5th Opression
6th Disease or morbid excitement
7th Prostration of the System below the healthy Point
8th Disorder &c
9th Death we are born with an innate Predisposition to Disease or morbid excitement.
The different forms of Disease are six:-
1st Convulsion this is the Proximate Cause of Fever and is chiefly confined to the blood vessels -
2d Spasm this chiefly effects the muscles and is divided into Tonic & Chronic the former is constant the latter alternates
3d Preternatural heat either external or internal as in the Skin Stomach &c
4th Itching this appears in different Parts of the Skin Arms &c. &c

3th Aura. or Shocks as aura arthritis or gout and are called by the French Tic Doloureux but more properly tic Doloriffica or Lorrorifica —

6th Suffocated excitement which includes oppression and Prostration, this occurs chiefly in the lungs, ~~and~~ brain, and the Blood vessels &c —

The Effects of Disease are, ~~first~~

1st Inflamation. or effusion of red blood in the serous vessels & error loci, after this has continued for some time, the circulation becomes languid, congestion tremors &c are produced —

2 an effusion of serum or Coagulating lymph hence pus seated in the trachea, lungs, Uterus, &c; and Hemorrhage and black vomit &

3 Secretion and excretion ~~and excretion~~ as mucus, serum. &c —

4th Schirrus indurated tumours

5th Unusual sensibility and irritability
6th Eruptions
7th Bone Stagnation
8th Cancer –
9th certain changes of the blood and all the fluids in the body, rendering them acrid and altering their Proportions –
10 Gangrene and death

Seats of Diseases

These are sometimes with difficulty as ascertained;
1st Because diseases are sometimes chum.
2d From the effects of Sympathy we find it impossible to Judge precisely of the disease. How many diseases of the brain are produced by affections of the Stomach and vice versa? How often do the signs appear one in the other. A woman was seized with a violent puking or discharge

of bile from the ~~stomach~~ intestines, which would be supposed to be brought on by sympathy of the liver, when the Uterus alone was diseased and the liver was in a healthy state and sympathy alone acted.—

3d in all general diseases the seat changes with the weather

4th Dissection will not shew us the seat of disease

1. Because they often shew us none,
2. they deceive us by presenting effects for causes
3. They often find marks remote from the diseased part; for instance in one kidney without disease in the other.

I do not speak against dissections ~~on~~ but recommend them in certain parts of the body. Is there no sign of the existence of disease but pain? Pain is by no means the only symptom of disease; in both arms there exists a more certain sign of disease than in any other part of the body. I mean the pulse, when it fails to give us any

Monday the 2nd January —

information of disease wh is seldom the case, the tongue, excrements, countenance, the eyes &c may give some insight. I have called the pulse the nosometer or dial-plate, & by an attention to it I have discovered disease and prevented death.— When the Patient did not complain, a uniform knowledge of the seats of ~~disease~~ pain is not only useful but hurtfull to us. The whole arterial system is as much a unit as any viscus in the body —

Signs of Disease

a few observations are necessary

1 Relation, Sympathy, & association, differ in the diseased and healthy state

2d Signs of the same disease differ in different People

3 They differ in force

4 They differ in different climate

1st Countenance
2 position
3 Senses
4 Faculties of the mind
5 Perspiration as to quantity
quality & extent
Pulse

5th They are in many instances a part of the same disease

6th They differ in the same disease

7th They differ as it relates to its forming State

8th They relate to its height crisis and tendency to health

9th They differ in different days

The Signs of different diseases are taken

1st from perspiration urine & feces

2nd the tongue

3rd Respiration

4th Conversation

5th the position of the body when in bed

6th State of the muscles

7th Appetite

8th Mental faculties

9th State of the body as to heat & cold

10th The existence of pain also the nature of it

Hall in glands
heavy in the substance of the
Brain Pungent in the mem-
branes of the brain burning in
the Skin

Remarks on Pain

1st There are diseases without pain—
2d The pain is not always in proportion to the disease—
3— Often felt in parts remote from the disease which excites it, as headach from bile in the stomach
4th Altho an unit it imparts different sensations, according its seat being acute in the membranes twisting in the bowels griping, in the toothach &c
Related to pain is anxiety, nausia is an-other sign of disease different from pain and anxiety
Pain is sometimes so acute, as to destroy life. I must again repeat that of all the signs the pulse is the most valuable
Diseases of the head yield most readily to purging, those of the lungs to V.S., & those of the extremities to blisters; is there no sign of disease in the viscera but pain? the pulse, the tongue, the countenence, the eye, the perspiration, respiration, urine, feces, &c are indications of these. I regard

the pulse as the most valuable, let not any one of these direct you as to the cause of disease, or in your prescription for them. — My doctrine regards none of these, but in it, the greatest homage is paid to the pure

Pulse

The pulse may be called a nosometer or compared to the dial plate of a watch or clock it informs you of all that is going on within the body —

In order to acquire an accurate knowledge of the pulse in all its diseased states, it is necessary that we should be acquainted with it in its healthy state, and also in the different stages of life; in the healthy state of the pulse in an adult it is full, round, vigorous, soft, free from resistence to the fingers, and at equal intervals; this state differs under different circumstances, as

1st it varies according to the age of the person. At the commencement of life or soon after birth the pulse range between 130 & 140, to ends the end of the first year 124, at two years of age from 108 to 120, at three years from 90 to 108, at 4 5 & 6 from 90 to 108, and at 7 years of age it falls from 90 to 72; in an adult it is from 66 to 88, generally 66: in old age it is slow and intermitting.

This is so uniformly the case that regularity of the pulse in old age is an indication of disease, at the age of sixty the pulse beats sixty. In an old person of this city it beats only 36, in Rome, according to Dr Heberden it descends as low as 28 in a manner

2 Sex influences the pulse in its frequency, that in ~~the~~ females more frequent than males

3 Different states of civilization or society influence the pulse, it is slower in savages than in persons brought up in a civilized state. Savages want the numerous stimuli of thoughts, mental exertion, and conversation which civilized people enjoy, hence ~~to the~~ pulse is less frequent in country people than citizens. I have felt the pulse of ten Indians, and found it below 60 in eight of them, the other two reached to 60 but one of them had been previously sitting by the fire, & ~~the other was~~ the other was the son of a French man by an Indian mother, all those who spend their time in idleness have slower pulses than those who are busily employed –

4 Do the size of people effect the arterial system, its pulsary motion being quicker in short statures than ceteris paribus them in long or tall persons.

5th Climate & the different seasons of the year affect the pulse being quicker in warm than in cold climates. In Greenland it scarcely exceeds 40, in the West Indies it is quicker in new comers than in the old inhabitants, in new imported slaves than in those who have lived some time among us. —

6th Different times of the day influence the pulse, It is lowest in the morning at 7 o'clock, highest at noon, and then gradually descends untill evening, at bed time it is slowest on account of the exaustion of excitability. —

7th Different in the sleeping and waking states; quicker in the latter than in the former by 8 or 10 strokes —

8th Different positions of the body influence the pulse, it is slowest when lying on the back, quicker when on the side, and still quicker when sitting up, & quickest when in an erect position —

9th Fasting food or drinks especially such as are stimulating influence the pulse by quickening it —

10th Different positions of the arm influence it, when the arm is exposed to cold for some

time it becomes slower, & also when the arm is pressed under the body for some time, and when the muscles are in action, hence the propriety of warming the arm before feeling the pulse also relaxing the muscles —

11th Exercise of the understanding & passions of the mind influence its, tho of a relative, lowering and vice versa. Anger quickens it to 140, Conversations also quickens it. hence the propriety of feeling the patients pulse before he begins to describe his disease

12th Bodily exercise. If the natural state of the pulse be 64 when sitting, standing will raise it to 68, walking at the rate of 2 miles an hour will raise it to 74, at the rate of 4 miles 88, and running from 140 to 150 in a minute —

13 Pregnancy quickens it, it is also quicker during menstruation; it is of consequence to know this in the chronic state; all pregnant women have then pulses preternaturally quick or slow

14 Certain medicines quicken the pulse such as emetics, Cathartics, Opium, Bark, Blisters, hot and cold bath. —

15th coughing quickens it, hence the im
propriety of feeling the pulse immediately
after a paroxysm of coughing in
pulmonary complaints —

16 Fear influences it, hence in visiting
a patient we should wait, that he
may get over his agitation produced
by our presence. I have seen the pulse
fall after prescribing ⅳ. —

17th Intensity of thought influencing
respiration lessens the pulse

There are some exceptions from these general
rules of the pulse; e.g. there is a gentle-
men in this city whose pulse is 120.
when in good health, and a lady
whose pulse does not exceed 50 in good
health, and amounts only to 60 in
high fever; and in others it is pre-
ternaturally quick. I heard of a gentle
men whose pulse in a healthy state
beat 120. in a minute, a fever afterwards
restored it to its natural standard that
is the common standard. There must
have been too much excitability
in the system and this disease or
morbid state was removed by the
action of Fever —

before I enter on the morbid state of the pulse I deem it necessary to deliver a few Phisiological Propositions. as

1st The heart and arteries are connected and invested with muscular fibers possessing great irritability or a susceptibility of being acted upon by the different stimuli; hence if one part be effected the whole will sym pathise. They may be compared to the sensitive plants or to the bells of the Jewish high Priests robes when one was touchen in obstruction all seeing a general peal in unison.

2nd The heart and muscular fibers possess irritability —

3 The motion excited in one part of the arterial system is communicated to others. This is illustrated by the case Picks, who died in this city with enlarged omentum which pressed upon the ~~omentum~~ aorta and effected the whole arterial system. This will lead to the explanation of many other

appearances; for in most diseases we may expect to find the same kind of action in the artery as in the diseased part –

II. The pulse tense in acute pneumonia. The same occurs in the pleura or membrane of the lungs in the whole arterial system are the vessels of the lungs engorged; in pneumonia Notha, the same occurs in the whole are there intermissions in the pulsations of the heart; the same takes place in the whole arterial system. If the stomach or upon bowels inflamed ~~the~~ ~~turn~~ the pulse is small, because the vessels of these parts are small. The pulse is ~~small~~ more tense in inflamation of the colon only, because the arteries of these parts are larger. If the pulse is not small in inflamation of the joints and of phlebitis it is ~~only~~ because the larger arteries are called in to sympathy by contiguity; there are diseases in which the pulse do not sympathise, but these are few & may arise from the following circumstances

1st from a want of irritability
2 from suppressed excitement
3. from the disordered state of the artery at the wrist

4th from a large portion of fat ~~at the~~ pressing upon the artery
5th From an accidental pressure of the muscles of the arm by the posture of the body
6th from cold
7th from want of irritability in the contiguous parts
8th from a want of sympathy in the heart preventing it from equalizing the action of the different parts —
9th from an unequal excitement in the blood vessels as in the

Cough this want of harmony accounts for the facts mentioned by John Hunter, viz. Sizy blood with a natural pulse. There may be great disease in one part with but little action in another. Yet not the number of these exceptions preclude the feeling of the pulse, for they do not occur in more than one case in twenty. we sometimes see absence of pain in malignant fevers when the tongue is foul &c

and vice versa in diseases of leg consequence
; thus, I have mentioned the different states
of the pulse as they occur naturally in
the different stages of perfect life. —
But as Physicians it becomes us to go
farther, and to acquire a knowledge of
this important part of the human frame
; as it varies in consequence of the numerous
incidents and diseases to which it is
subjected

The Morbid States of the Pulse

These are known

1st By their frequency and quickness; these
are not necessarily connected for the
pulse may be very quick and yet
not frequent as in the yellow fever:
by frequency, is meant the number of
strokes in a given time (to it in a
minute), & by quickness, the time in
which each stroke is performed. The
pulse varies from health in quickness
and fulness as in the yellow fever and
other acute diseases; here it varies from
68 to 180 & even 200 and falls in some
diseases to 40. 30. 20 and in one or two
cases to 9, in apoplexy it some times to 7. —
The quickness is probably caused by

the irritable state of the blood vessels; they contract more quickly by the stimulus of the blood (the arteries especially), this irritability I conceive to be induced by the stimulus of miasmata; hence it occurs in intermittents, yellow fever &c this circumstance in some cases gives rise to the intermitting pulse. This is when there is a cessation of pulsation for a certain time after every one two or three strokes and frequently occurs in malignant fevers. The slowness may depend on these causes

1st Pressure as in apoplexy & palsy the pulsations being equal to each other but intermissions occur

2d Spasm of the heart

3 a defect ~~a defect~~ of irritability in the arteries ~~By of~~

4 By their force and irregularity this is of more consequence than their variation in frequency quickness and fullness also by an hasting a sensation of a shelered quick

We now proceed to consider the different States of the pulse, as they occur in fever; & the first I shall treat of is

~~to~~ The Depressed Pulse —

This State of the pulse, is occasioned by Stimuli acting so violently as to depress the System below the point of reaction, or by pressure on some vessel: it often descends as low as 40. 30. 20. and some times ~~as low as~~ so depress as to be imperceptable, it is raised by vs. It is sometimes preternaturally frequent or slow attended with intermission, and some times natural: it occurs in Plague, yellow fever, and malignant Small pox, it is either partial or general, occuring in the extremities in the former, in the latter, occasioned by Stimuli depressing the strength below the healthy state; it resembles the weak or Typhus Pulse, the following direction will serve to distinguish them

1st The depressed Pulse is known by its occuring in the beginning or forming state of fever or in the paroxisms of such diseases as are periodical

2d By imparting a sense of tension to the fingers when long and attentively felt

3d By accuring in morbid affection of the brain, heart, stomach, and bowels, more frequently than in diseases of other parts of the body

~~4th By its being frequently attended with slowness or intermission~~

4th By its being raised by Bs, and fingers taking of suppressed excitement

5th By its being frequently attended with slowness and intermission; this Pulse may be compared to a tree bent with the wind and rising to its former state when the winds are blown over: while the Typhus resembles a tree shattered with the lightning which can only be raised by the plastic hand of art —

2 The Catgut, ~~Pulse~~ Sulky, or Wire pulse. This is small, quick, tense, and distinctly imparts a sensation to the fingers similar to that produced by feling a peice of tense cat gut. when I have named it it occurs in malignant fever

3d The Synochus fortis. The reverse of the two former; a full, round, frequent, vigorous, & quick Pulse, without hardness; which occurs in the highest grade of bilious fever: exercise produces a pulse somewhat similar to this

4th The Synoche or common inflamatory pulse, being full, frequent, quick, and tense, but not round. ~~and It~~ is known by the heat and thirst and occurs in common inflamatory Fevers; this Pulse exists sometimes in the Plague, yellow Fever, ~~and~~ a small Pox, but more frequently in pneumonic affections, Rheumatism, and arthritis

5th The Synocnubia is quick, frequent, & and a diminution of Synoche imparting to the fingers a sensation resembling a small quick, and occurs in chronic Rheumatism, gout, Phthisis Pulmonalis, and in the second stage of other Fevers

6th Synochoid, this is alternately soft and hard, imparting to the fingers the sensation of a shattered cord and is a compound of the Synochus and Synoche. It occurs in the

passage of Fever from the inflammatory to the Low State, or from an acute to a chronic disease, and feels like a bruise which has been trodden upon

7th The Typhoid, a frequent and at less tense ~~pulse~~ than full pulse. ~~This is~~ This is compounded of Synocha & the low state or chronic state of fevers but occurs in hectic, & the puerperal fevers, - also in Peritonitis; the pulse preceding Typhus are above par those succeeding Typhus are below par —

8 The Typhus Pulse is a weak, small, frequent, but not full or tense. ~~Pulse~~ This occurs in the low ~~state~~ chronic state of fevers, also in the close of inflammatory diseases when depleting remedies have not been used in the first stage; the blood vessels in this appear to be deprived of part of their irritability, it is here that V.S. is forbidden and stimuli are to be resorted to. —

9 The Hectic pulse, the forms of this pulse are various, being

being occasionally synochoid, Typhoid, Typhus, it occurs in Phthisis Pulmonalis, in lues venerea, and Scrofula.

10th The Hobbling Pulse is unequal, fluctuating, tense, quick, and very frequent, and it may be divided into two, 1st 1.2 or 3 quick strokes succeeding a slow one, and second 1.2 or three slow strokes succeeding a quick one -

11th The Bicrotic or capricous Pulse the former of these being stronger

12th The Serrated Pulse imparts to the fingers ~~of a~~ the sensation of a saw

13th The vermicular Pulse. small, frequent and resembling the motions of a worm

14th The Creeping Pulse. weak, small, and occurs in the close of life it has been called a dying Pulse -

15th The apparently natural Pulse seems in the worst state of health and Fever, great danger is to be apprehended from this Pulse, and it is difficult to be distinguished from the healthy one. Scarcely any one of them alone present, they are therefore combined

1st In double proportion as full and weak full, and frequent depressed and weak, slow and intermitting &c

2d They are combined in a threefold relation, as full, strong, and frequent; small, weak, and slow at the same time

3d By a fourfold ratio, as full, strong, quick, and frequent, at the same time

15th A full, bounding, slow, & moderately tense pulse, which occurs in dropsy, palsy, &c it is especially slow in the affected side as in hemiplegia. I examined the pulse in a paralytic patient whose artery on the affected side beat only 40, in whom on the other side it beat from 80 to 90

17 A Weak, slow pulse without irregularity: this occurs in debility without fever, and is distinguished from the weak low pulse in malignant fever by its occurring in the last stage

18 The Arteriometric pulse, full, tense, and bounding. There is some times an absence of pulse for two or three days,

I have heard of the absence of it for ~~two or three days~~ 7 days; this pulse occurs in Anemias whence its name. A total absence of the pulse occurs in violent affections of the Stomach & bowels, ~~it lasts~~ it lasts for hours and days; one lady I have known to be without pulse for 36 hours in consequence of eating oysters, this lady has since recovered and been quite well for several years

In order to inform your patients of the state of their pulse which they are some times extremely anxious to know you should compare it to a scale of 10 degrees, 5 below and 5 above the healthy point. The pulse is very much influenced by the strength of the body: In a Pigeon it is 100, In a dog 80, and in a ram it has been found to be at but 65, and in an ox from 36 to 38 in a minute — I have now delivered all the pulses wh have occurred in my practice Dr Dalmas a french Physician has discovered another which he calls the gaseous pulse —

— Gaseous Pulse

Soft, full, and round, but sinking under the finger — I shall next give some di

rections for acquiring a knowledge of the State of the pulse

1st Never feel the pulse of a patient the moment you enter the room, your presence excites some passion as hope, fear, or some emotion in the mind which has an influence on the pulse If the weather be cold warm your hands and feet first. But beware of entering into conversation Before you feel the pulse as the influence of conversation is very great on the pulse -

2d Place all four of your fingers on the artery. this enlarges the surface of touch and gives you a better opportunity of Judging than one finger would do

3d If you feel the patient's right arm use your left hand and vice versa

4th Feel the pulse of both arms, as there is in many cases a difference in the two; from several circumstance, as the exposure of one arm to cold air, pressure on the artery &c. I have corrected my judgement frequently in this manner

from one I had prescribed for and exam-
ing the other I retracted my determination;
never remove your hand until you
have felt 20 strokes at least: I have obser-
ved an intermission after the 4th stroke
the Chinese Physicians feel till 4 & 9 and
hence perhaps their accuracy in the pulse
If the case be critical shut your eyes
and order silence and to use an ex-
pression of Dr C Darwins concentrate
your sentient power in your fingers
ends
The Influence of sound &c ~~counteracts~~
detracts from the accuracy of feling
the pulse: if the radial artery from
any cause be not easily gotten at or felt
use the temporal which is the next
best; & here Gentlemen excuse my men-
tioning a caution in the application
of blisters, never to apply them so as
to prevent your feling the pulse —
If you do feel it afterwards, you will
give him so much pain as to make
an alteration in the pulse The tem-
poral artery must be felt, this artery
you must also feel in diseases of the
brain

Now Gentlemen, I have related the knowledge I have been able to acquire of the pulse during my readings & practice. They are the experience of my life. They dictate when bleeding is necessary and medical the quantity; always feel the pulse before you prescribe any of the following remedies emetics, cathartics, &c, hot and cold bath, Pectoriorum, and before the use of stimulating medicines, as the bark, wine, &c also before stimulating clysters, and drinks, as they change the pulse very much, the frequency of the pulse has of little consequence compared to the force and other characteristics of it. has been much relied on by the physicians in Europe especially of Britain. They use it for acquiring a knowledge of it a moment ~~dat~~ watches Quarter minute glasses, &c hence we read in European authors the discriptions of diseases in which the pulse was so and so frequent, without describing its other more important characteristics as force quickness tenceness &c

But this is ridiculous tho a Spanish
Physician by the name of Solana -
has made many observations on the
Pulse from some of which he asserts that
180 is the greatest number of strokes wh.
the arteries can beat consistent with
the recovery of the patient. but 200 in
the Hydrocephalus is common but
whether they recover I know not
The observations of Cullen are opposed
to those above. Furthermore he says
the Spanish Gentlemans observations
are useless Plato we are told had
inscribed over the door when he taught
his pupils Let no one enter here
who does not know Geometry
In like manner were I to dedicate
a temple I would inscribe over the
door of every apartment
Let no one ~~enter~~ depart hence who does
not know the Pulse

The Remote causes of disease.

We come now to treat of the different causes which lay the foundation of disease. It has been aptly said, that as soon as a child comes into the world, it inhales the living principle of death. The remote causes predisposing children are the following as

1st The Ignorance of the midwife as it respects delivery

2d Washing the child in alcohol Rum Soap &

3d The use of Spirits internally and cordial diet

4th Sucking bad milk

5th Improper Clothing

6th The manner of education, confinement in close Schools &c

7th The amusement of children subjecting them to falls, bruises, burns &c —.

The atmosphere produces diseases by its sensible & insensible qualities;

The former are heat, cold, moisture, dryness, density, and rarity, those of the latter or of insensible qualities, are Miasma and human effluvia &c; from these originate all female diseases or complaints. —

Heat, this is an universal stimulant, when moderate (as at 75 degrees) it is favorable to health, but when above this it produces debility from action, when in excess its effects are shown

1st On the nervous system producing fever

2d When combined with the rays of the sun it effects the brain producing what has been called insolation, also ~~death~~ sleep, stupidity, and even death—

3d on the nervous system producing weakness, languor, nausea, vomiting, involuntary motion of the muscles, tetanus &c —

5th Stinking pimples, and brown colour.— When moderate, it produces moisture, perspiration, & sweat; ~~&c~~ but when in excess preternatural dryness &c

6th On the stomach, increase in the appetite

7th It increases the venereal appetite —
8th It produces a tendency to putrefaction in the blood
9th It gives the humours in the body a cutaneous determination, as in bubos, glandular swelling &c &c —
10 It increases the excretion and secretion of bile, which corrects the tendency to putrefaction mentioned
11th It favours the production of the men
12 th It affects the eye sight producing Gutta Serena Ophthalmia &
13 th It weakens some of the operations of the mind, but strengthens the imagination
14 th It lessens the density of some of the solids
15 th It is less friendly to young than to old people, hence the practice of the ancients of changing a ~~warm~~ cold for a warm climate when they got old, by this means they prolonged their lives 10 or 12 years. —

The Relative effects of Heat. —
When the system has been exposed to cold it is then acted upon more

forcibly by heat; warm winters are followed by unhealthy springs, hence the propriety of the old saying that a green Christmas makes a fat churchyard. Weather becoming temperate after being very warm produces this cases by checking perspiration. — Autumns succeeding very warm summers are often attended with bilious fevers; the autumn of 93 was preceded by a very warm summer —

No climate is necessarily unhealthy, but they are made so, by the ignorance of the inhabitants; for it is ascertained that chefs, diet, ~~&c~~ drinks, ~~&c~~ the passions of the mind &c have great influence over the body: uniform dry weather ~~&c~~ seldom induces disease; only when succeeded or preceded by moisture that diseases are generated ~~th~~ in one season and produced the next. Upon the whole, I conclude, that wet seasons are generally healthy, and that most diseases ~~&c~~ are produced by ~~to~~ a transition from heat to cold and vice versa —

Of Cold. This has been erroneously supposed as a stimulant upon the system, its effects are negative, it acts only by the abstraction of heat. It is a sedative Tonic

1st from the general debility it produces
2d from the slowness of the pulse and weakness
3 from its effects being similar to other debilitating causes, such as Vs, Cathartics, &c is the pulse slower in pleurisy yellow fever &c; so it is from depression is it raised by Vs; so it is by the abstraction of the excess of stimuli. Cold acts by inducing direct debility or debility from abstraction. Heat, by inducing ~~the~~ indirect debility or debility from action: upon the application of cold, part of the heat is abstracted hence the apparent tonic power of cold when the body has been debilitated by ~~cold~~ heat —

The effects of Cold are

1st ~~upon~~ the arterial system, by inducing debility or increasing excitability thus rendering the system ~~the~~ ~~system~~ to all kinds of Fever

2d Upon the nerves producing dullness of sensation

3 upon the muscular fibres producing langor, debility &c

4th ~~Tt~~ invigorates the appetite; hence in holland the habit of having warm stables in order that their horses may eat the less

5th ~~Tt~~ weakens the venereal appetite

6th ~~Tt~~ increases considerably the discharge of urine

7th ~~Tt~~ is unfavourable to sight

8th ~~Tt~~ operates with other causes in producing scurvy

9 th ~~Tt~~ exposes old sores to bleed afresh

10 th ~~Tt~~ is unfavourable to vision

11th ~~Tt~~ in a certain degree produces paleness of the skin in a greater redness in a still greater purple or dark colour

12th ~~Tt~~ acts powerfully in sleep, hence most diseases attack us at that time

13th ~~Tt~~ acts more powerfully upon old people than young, ~~[illegible]~~ hence we hear of mothers being found dead with the cold with their children by their sides alive, this is proved by the case of a woman, who was found

dead and her child alive and at her breast. Weather uniformly cold is healthy; in Canada diseases of all kinds are locked up, they are only let out when heat succeeds or precedes cold. Heat succeeding cold produces diseases, the Spring of Russia produces fevers of a peculiar kind, & am fall also. Thus the diseases of cold climates are generated in one season, and produced in another. & vice versa. Heat does not produce diseases after the long application of cold because the vessels become torpid and are not able to react; cold produces diseases in northern climates when warm dresses, houses, &c are not used. The sudden transition from heat to cold does not necessarily produce disease or vice versa, more care and attention in accommodating ourselves to the weather by dress, diet, drink &c. would prevent diseases. Middle latitudes are not necessarily unhealthy tho they require more care and attention to bed clothes and dress—

The church, change their dress three or four times a day in order to accomodate themselves to the weather; cold feet in direct catarrh. Nine tenths of the diseases of the system are received into the system by avenues of the feet & mouth. Cold acts more powerfully on the system in the sleeping state than in the waking, hence nine tenths of the diseases are taken in the night. Cold acts more powerfully when the stomach is empty, more powerfully on drunkards than on sober people, because the first are generally very much debilitated when not under the effects of stimuli—

Cold as I have said is the predisposing cause of all diseases, more suffer from it than from any other cause in nature, not only of man but of all other animals; diseases are also more numerous from this than from any other cause, in short, there is not a greater enemy to the health and life of man than cold

The spring and autumn between the degrees of 35 and 50 are the most healthy: heat and cold act differently in different months the following is a table of mortality for one year

	Total	Boys	Girls	Men	Women		
Jan	142	50	11	11	11	11	11
Fe	111	46	11	11	11	11	11
Mar	112	11	11	11	11	11	11
Apr	108	11	11	11	11	11	11
May	107	31	29	21	11	11	11
June	97	21	27	8	11	5	9
July	85	29	20	14	8	3	10
Aug	130	36	35	12	34	9	9
Sep	110	43	35	18	13	5	15
Oct	216	42	34	101	18	7	9
Nov	192	38	35	30	15		
Dec.							

The effects of winds in producing disease. Winds are hot and cold, dry and moist. They are moist from the east, and dry from the west, in this country ~~FAR~~

~~within this country~~ ~~[illegible]~~ there fore, certain changes effect the body when accompanied with winds.

They produce certain changes of the mind as the

They act more powerfully upon invalids, than upon healthy persons; not only winds but the absence of them produce illness

Effects of the rarity and density of the atmosphere. ~~Air highly rarefied~~ produces diseases, great muscular weakness, difficulty of breathing, fulness of the pulse, profuse sweats, sickness of the stomach, sleepiness, and an aversion to ardent spirits, and great pain according to Mr T—

These effects are attributed to a more rapid combination of bynte in nahaganges and a deficiency of Oxigen. Baron Humboldt who ascended the highest mountains, said it produced hemorage from his nose, eyes, mouth, and &c. By his endometer he found the oxigen descend to 14 parts in 100: and too dense, is very hurtful to asmatic and consumptive patients

1st Marsh Effluvia or as Dr Miller of New York has them Coined miasmata ~~or~~ exalations ~~are necessary for the production of them~~ for the production these two things are necessary, viz. heat, and moisture the thermometer should stand at 60 when the ground is covered with water or no exalations can take place; but when the ground is neither too or overflowed these exalations are produced. The Summer should be considerably moist to produce exalations, or miasmata; heavy rains, have sometimes produced miasmata by washing off the coherent pellicle or gummy crust which is sometimes found in stagnant waters, and which prevents the sun from acting on it, without which the miasmata can not be produced: these exalations are partly from vegetable and partly from animal productions but more commonly from the former; the following vegetable matter produces Marsh effluvia

Hay, Pulse cabages, Parsnips, Peppermint, Onions, anise, cinnamon seed, coffee, cotton compressed in the hold of a ship, hemp, flax, straw, old books and paper — many the timber of old houses; log-houses the 2d year after they are built in consequence of the putrefaction of the bark, green wood confined in cellars, green timber of a ship, also air stagnating in the hold and in cellars. Stagnated water when agitated produces miasmata. Fevers are not so often produced by animal as by vegetable effluvia, there are however a few which are produced by the former — .. — .. — .. —

2d Human Effluvia or The miasmata of Dr ~~Mitchel~~ Miller of N.York. These are produced by want of cleanliness of the person, Dead bodies.

1st raw Hides & Macerata act first upon the Stomach

2d upon the Intestines, producing cholera morbus, dysentary, &c

3d upon the liver, increasing the secretion of bile, and imparting to it virulency and acrimony

4th Upon the blood vessels, producing yellow fever, Intermittent, remittent, Typhoid, & Typhus, or low chronic fever, and febricule, or mitigated fever, Hemorrages &c

5th Upon the brain, kidneys, and spleen, and more particularly on the latter producing inflammation or induration called Ague cake

6th Upon the nervous System

7th Upon the muscles, producing convulsions &c

8th Upon the Lymphatics, producing glandular swelling

9th Upon the eyes, producing ophthalmia

10th Upon the Skin, producing carbuncles, eruptions &c

The human effluvia are of two kinds arising either from secreted or excreted matter; miasmata may exist in the body 20 or 30 days without producing disease: sometimes even six months. Effluvia are more noxious in the morning and evening than in the middle of the day—

They are always a source of disease and are influenced by the following circumstances; uncleanliness, confinement in large crowds, sewers stagnant. vegetable diet, scanty and putrid animal diet, mixing of strangers together, great prostration and grief of mind all these predispose to disease

Cold weather is not favourable to the spreading of contagious diseases, in consequence of the houses being shut to keep out the cold; woollen cloths and others retain and spread diseases, in contagious diseases also, wood walls is whitewashed and will not retain the effluvia of Typhus Fever. Effluvia act more powerful by when debilitated. Pregnant women often escape the yellow fever in consequence of the distension from pregnancy; all persons affected with running sores escape it. persons are incapable of infecting themselves with miasmata. Persons highly charged with miasmata may infect others without being affected themselves —

Effluvia affect 1st the blood vessels
2d the brain with delirium
3rd the glands
4th the intestines producing dysentery
5th Intermittents & malignant fevers
6th Scurvy, catarrh, & Influenza

Human effluvia are often combined with marsh miasmata in producing bilious fever; they are seldom conveyed more than 10 or 12 feet from the body: no climate is necessarily unhealthy for fevers depending either on marsh or human miasmata are owing entirely to the carelessness of men; were we to take the necessary precautions to drain our meadows of their stagnant waters, to remove all putrefying matters from about us, keeping our persons &c clean, those mortal diseases would cease to infect the human race.

They are like vermin sent to punish us for our laziness and folly: the Jail fever is rare in the united States, because there is not so much poverty and filth amongst our

our Citizens; as when those fevers abound — for these are the causes which give rise to these fevers in other places. The fall fever differs from the yellow and bilious fevers in the following particulars

1st It comes on in cold weather and is not affected by rain or frost

2nd It most frequently attacks the weak and infirm

3d The pulse is Typhoid

4th It continues from 20 to 30 days

5th It is propagated in a different manner by excretion and perspiration

The yellow or bilious fever is distinguished in the following manner

1st By attacking in warm weather

2nd By coming on suddenly

3d By attacking the young and robust principally

4th By remissions and intermissions

5th By the increased secretion of bile

6th By its being of short duration as 3. 5 or 7 days, but it sometimes runs on in a chronic form to 20 or 25 days

7th By its being destroyed by cold and heavy rains. The Human or Dea ~~emanation~~ exhalations and the marsh or chino-miasmatic exhalation, ~~on all~~ effect the blood vessels in all the following forms of fever viz The bilious, mild bilious, remitting, intermitting, Typhus, Typhoid, and Febricula

The third Source of disease or Phlogiston

1st Air is rendered impure by respiration and persons effected with Typhus are greatly effected by this air

2d It is unwholesome when mixed with the fumes of sulpher or charcoal ~~the~~

3d the air of certain manufactories as that of lead, arsenic, &c are unwholesome when they are volatilized

4th After earthquakes the air has been known to be exhemely noxious especially after one that happened in Jamaica in 1792

5. the

6th Winds which have passed over hot sandy Countries

7th. The air of certain mines; if birds fly over certain mines in Scotland they are immediately killed Sundays excepted: on Sundays they may pass with impunity as the labourers are not there at work. hence we may learn an important lesson that the remote cause is not capable of producing without an exciting one, & in yellow fever I have never seen a case to which I could not trace the disease to some exciting cause or other which brought it into action —

After having thus treated of the impregnation of the air and their influence over health we will proceed to treat of the effects of situation over health. New countries are generally healthy untill the trees which exclude the action of the sun are partially removed. From the time of clearing untill cultivation it is sickly. The wood cutters in the cedar swamps of Delaware and North carolina enjoy good health while the trees are

are standing, but after they are cut down and begin to putrify health alters them in consequence of the sun's influence upon them and other vegitable substances. Towns are more sickly than the country. It has been computed that 3 or 4 die in the town to one in the country. Sand soils are unhealthy. Vicinity to towns and marshy grounds are great sources of disease. Vicinity to rivers and ponds; these last may be prevented by heavy trees planted round them. A mountainous country is more healthy than a low situation but there is one exception to this, where the effluvia arise from the bottom and neighbourhood. Other local circumstances effect the healthyness of situations. Very quick lime in a cellar more unhalesome than in a room above ground -

Houses built so as to receive the action of the sun in every part are not so healthy as those built in a different manner; Dwelling houses are often the sources of diseases from the green materials -

of which they consist. This may be prevented by 1st taking the timber in water, by which the sap is thus changed, also by being built with stone. 2nd by the vapour of new plastered. 3rd by moisture of Cellars, 4. By small smoky rooms, want of cleanliness &c. I knew two cases of malignant fever near Zach any count in this city and none of the neighbours were effected ~~by it~~ with it –

2d I also knew 9 heads of families die with it and none of the neighbours were effected. This probably originated from something impure in the cellar or from some other local cause –

3d by & lastly a fact ~~more~~ more appropriate to an subject related by Van Swieten Viz that the whole of the students ~~of medicine~~ together with the master of the university were all diseased when none of the neighbours were in the least effected. This probably was from the excalations of privies, cellars, or some such local cause

Change of Situation over health

1st Persons changing a warm for a cold climate are frequently effected with fever

2nd Persons leaving a sickly neighbourhood and coming to reside in the city are effected in the same manner. of the miasmata in this case being previously received into the system and excited into in consequence of action by the many exciting causes in the city —

3d Old people living in cold climates on coming to a warmer climate often become more healthy while the same change in young people would induce inflamatory complaints —

4th Removing from a marshy to a dry airy situation often contributes to health, except in aged people, who often suffer from the change since it deprives them of their usual stimuli (Marsh. miasmata

which on a former occasion was said to be the support in part of old age but the distinction of youth and middle age

2. The Those who have made long sea voyages are frequently affected with catarrh, on their near approach to land in consequence of a mixture of sea and land air an old sea captain with whom Dr Rush noted the Ocean was always able to predict the approach of land in consequence of a slight catarrh — I have been at much pain and trouble in trying whether thunder and lightning in dependent of the change of the air had any influence on the human system in producing disease, but have not been able to collect any thing certain on this subject. I knew a lady who could always tell the approach of a thunder storm by the giddiness and headach she always experienced some time before.

which continued untill the Storm was over. Some Persons appear to have been born with a fear of thunder.
A lady in this city some years ago in consequence of her dread of thunder would during the continuance of a thunder Storm, Shut herself up in a dark room and drink an unusual quantity of without being intoxicated; at any other time She did not discover the attachment to drink or liquor

Leeches by their motion appear to be sensible of the changes of the weather. Mr Cooper informed me he could always predict the approach of thunder by the motion of the leeches which he kept in his house at that time —

6th Sounds appear to effect some Persons. A certain lady in this city has always sweats chills, trembling by hearing the noise of a carriage drawn over the Pavement

of the streets. Deafness has occurred in two cases which fell under my own knowledge by firing of cannon under their death. birds have also dropped dead in consequence of the firing of cannons upon the decks of a ship. we will now consider the effects of the heavenly bodies on health &

1 of the SUN we have already stated in what manner the heat of this body operating on the air & influences the system we will now consider its light, absence &c. an excess of solar light sometimes produces blindness and inflammation of the eye, while its absence produces blindness in a temporary degree. from the want of stimulus ~~breath~~ both of women states are called Hypochondriacs whether it depends upon a superabundence or a deficiency of light, even the momentary absence of the sun

has produced alarming effects in the yellow fever, and the menace during the Eclipse of the Sun in the Pens Hospital were quite silent and gloomy. most diseases attack us in the knight; may not this be the consequence of the want of the influence of the Sun?

2d Of the Moon. The influence of the moon is felt by all animated nature, even the tides are owing to its influence regulation is measurable under it; death occurs more frequently at the full and change than at any other period. The paroxisms of many diseases appear to be influenced by the full and change of the moon. Dr Mosby mentions the case of a british officer who was regularly attacked with hemoptysis at the full and change of the moon, and at no other time.

I knew a person affected with the gout in this city, always to have the inflamatory paroxism about the full or change of the moon.

The moon effects the nervous system, also madmen, ~~also~~ hence the term lunacy. Epilepsy and Asthma seem to be under the influence of the moon. Parturition appears to be hastened by the full moon: worms are more troublesome in the bowels in children at the full and change of the moon than at any other time. Suicide appears to spread most about the full of the moon than at any other time. Hydrophobic and Epileptic patients appear to be very much influenced by the full and change of the moon. Dr Hallen speaks of a person who felt the calculus in his bladder more sensibly at the change of the moon than at any other time. Chronic diseases yeald less to the

moon than acute perhaps from the operation of the med.
keeping up excitement

Eclipses of the sun and moon have great influence over the mind. During the Eclipse of the Sun on the 16th June 1806 the lunatics of our Hospital were remarkably silent for three hours and one died during the eclipse. A more remarkable fact is the following 14 British Officers were attacked at the Sonna ~~[illegible]~~ during ~~the~~ Eclipse with an intermittent. had the Eclipse of the 16 June happened in the autumn when the system is predisposed to disease it is highly probable that disease would have been instantly produced. The diurnal rotation of the earth seems to have great influence in regulating diseases and may probably ~~and~~ influence them sometimes

The pulse changes with the different changes produced by the earth's revolution, for instance it is slower in the morning, quickest at noon, and slower again in the evening. Dr Darwin has happily called the evening the autumn of the day. It is of consequence to know this as they may be of great service in the treatment of disease both of the body & mind

Contagious Diseases

were formerly thought to be very numerous but they are now known to be much more limited They are divided into Sporadic & Intercurrent; contageous diseases are received into the system by means of the lungs, Salivary nerves, and Skin; they are sometimes called Specific contagion from only between parts of the system being effected as as ~~in~~ the small, and chicken pox, hooping cough ~~&c~~ Measles &c

The lues venerea, Itch, ring worm, and Diseases of the Skin. differ from the Small pox in being communicated only by contact, also in their originating in a fixed spot and the Small pox is in a volitile matter. Specific contagion set without an exciting cause. While the yellow Fever and other such diseases which I only consider as endemics seldom ever take place without an exciting cause.

Endemic diseases are such as occur in the same place or country & effect many people together originating from same local cause; notwithstanding what has been said to the contrary I believe the yellow fever to be an indemic of the United States. and the West Indies. ~~and has not effect a few only~~ Sporadic diseases are such as effect a few only at the same time and place.

Intercurrent diseases are such as effect persons here and there without any regard to time and place
Epidemic diseases are such as attack sometimes in scouting parties but more generally with great spunk and violence, they attact such a number of persons at the same time & place that it appears as tho they were going to destroy the whole human race, but they can be prevented, expelled, and vanquished by the power of medicine, in short Epidemic diseases may be defined to be those diseases which effect the whole community at once.
Epidemics arise altogether and invariably from the insensible and foreign matter in the atmosphere produced by chemo. miasmatic exalations and are small pox, Influenza, Cynanche Trachealis, malegna scarlatina &c.
Influenza may be properly considered diseases of the atmosphere
I will now deliver a few laws to which Epidemics are subjected

1st They are all influenced by the sensible qualities of the air of the atmosphere & the influency is excited
the small pox for instance, is more violent in summer than in winter. & the measles, and scarlatina, and angina, still more so.

2d They are all influenced by diet, climates of the season. Whilst fruits are used for instance the disease is thrown on the intestines

3d No two Epidemics of equal force and produced by different causes can exist at one and the same time. I would as soon believe that an horse could trot and pace at one and the same time as that two diseases can exist in the system at one and the same time

4th When ~~1. 2. or 3~~ 2. 3 or 4 Epidemics appear at the same time and place they all blend themselves together and one of them predominates over the rest and appears to make them

pay homage to it by wearing its livery
for there appears to be more mercy among
diseases as well as among men —
Therefore Gentlemen take notice in all
your prescriptions to have an eye
on the reigning Epidemic; hence the
reason why we see a person with a
broken leg or any other external in-
jury throw liable to be effected with
the reigning Epidemic as their injuries
predispose the system to the attack
of the prevailing disease. A young
man left this city in the time of the
yellow fever In order to avoid it, and
on his way to Germantown was thrown
from his horse and had his leg broken
he was very soon after seized with a
pthlack vomit and died in the course
of 4 days afterwards. The tyranny of great
epidemics is lessened before they depart,
hence ~~the~~ the small pox as it were
chases a way the plague. In Constan-
tinople: and the measle chased away
the plague from this city —
The first appearance of an Epidemic may
be compared to a Savage that attacks and
destroys men women and children.

When retiring to a dissected corpse of men who shed the blood of the innocent — It is in this stage of it that other diseases can take place or chase them away

7th They appear in a variety of forms & characters as

1st In the malignant, bilious, remitting, inflammatory, intermitting fevers &c

2d In the three different forms of small pox viz that with and without pustules and the confluent

2d They appear in different forms, in different years, and with different prognosis under different circumstances

3d The same causes sometimes produce different forms and appearances of disease

4th Epidemics with respect to their violence in different seasons, persons, and even ~~different~~ different days differ

4th Some epidemics require an exciting cause, while others as the small pox does not

10 They come on in some instances with great force and violence and sudden by vanish in consequence of great frost

~~11th They come on in sometimes~~
or heavy rains washing away the cause which produced them

11 They differ ~~in the present~~ in different parts of the same country

12th They are often limited to small bounds

13 They effect people of the same colour and nation often, whilst others of a different colour and nation escape: in 1793 the french and negroes escaped the yellow fever of this city

14th They sometimes effect persons of particular ages. Moses speaks of a plague which carried of many children only

15 They sometimes attack particular sex only. A plague once in Italy carried of about 6000 men and scarcely a single woman

16 They sometimes attack persons of particular rank only; the dysentary of 1747 in France attacked the rich only, whilst a plague in 1748 attacked the poor only.

17th They sometimes effect members of the same family and community only

1st They sometimes effect all nations and colours all ages and all sexes at the same time and place

1st They sometimes effect the human species only

2d They sometimes effect the human species together with cats, dogs, Horses, cows, sheep, and all the brute creation.

21st & 8 lastly It must be observed that different remedies must be used in in the Epidemics of different seasons and different circumstances

II The different Phenomena which have been known to attend Epidemics

1st that dry and windy weather with rain generally preceed an Epidemic

2d Weather frequently calm, so much so that the leaves cannot be seen to move on the trees and which authors have called Sine luna. Dr Nelson of Montreal mentions the case of an epidemic which was preceded by a long calm and smoky vapour -

3d Diseases that preceede epidemics are more fatal than at any other time

The diseases which follow are always of a more violent form and sometimes of a chronic nature when they are not violent

4th Cats appear to be affected in a peculiar manner previous to the appearence of an epidimic
Birds have been known to be more serene and have been known to die in their cages during the continuance of an epidimic. ——

Insects are more numerous ~~during~~ previous to or during the prevalence of an Epidimic, but this rule has an exception in the house fly for they generally disappear about this time —

5th Many trees emit a peculiar odour of a disagreeable smell, from their leaves and sometimes even the during an Epidimic

6th The pulse is preternaturally slow or frequent during the continuence of an epidimic Persons who were in good health become sick in consequence of it but sometimes it happens that persons who were debilitated before an epidimic have become quite healthy in consequence of it the miasmata in these cases by their stimuli excited them to the healthy point

Oysters and fish have a much shorter time during an epidemic. The clouds affected the patients in Charlestown by observing the sun whence the changes nineteen out of twenty are effected by the atmosphere; if epidemics are changed by somany circumstances they should be observed with a spy glass.
Some persons have supposed epidemics to be a Judgement or a cause sent upon us from Heaven. Reason not only rejects but loaths such nonsence — Let old women and children who assemble round a kitchen fire to hear the tales of fairies and Hobgoblings believe such an assertion —
Thus Gentlemen I have given you such facts as I have acquired from observation and experience during my whole life —
I think it proper here to observe that I think it the duty of Physicians to be students as long as they live

Aliments and Drinks as produce-
tive of disease. This is an important
part of our Pathology. I have said
before that nine tenths are recei-
ved into the System by means
of the mouth and feet.
Aliments produce disease by means
of their Quality and Quantity
1st By the Quantity diseases are often
produced by an over distension
of the Stomach and by affording
too much nourishment to the System
the effects of too much nourishment
will be in proportion to the exer
cise taken. A labourer can take
much more food without in
convenience than the Idle and
Sedentary: The Quantity ~~necessa-~~
~~ry~~ of food necessary for a labourer
is about 8 lb a day. but for a
sedentary man from four to
six is sufficient. C
tells us of a man who would
eat 25 lb of watermelon a day
without injury —

lewes to limited himself to 17 oz
of solid food and 13 of drink per day —
The diseases ~~of~~ which arise from a
deficiency of food effect children chief
ly. also slaves, and monks, who
from a false sense of religion de
ny themselves the necessary supplies
of life. children at the breast are
often diseased, from the mother
not giving a sufficient quantity
of milk. Since they are unable
to live on any other food the —
rhea Dysentery & follow

Slaves are often diseased from
having small allowances, and being
made to labour hard by cruel and
unthinking masters. Hunger appears
to increase the strength of the lion
very much who devours 20 lb of
flesh a day when he can get it.
hunger is said to have great effects
upon the temper. hence it is
said to break down stone walls
before it: it wears in consequence
of the strength of temper after

hunger that the Duke of Marlborough used to say that he prepared Scotchmen when hungry, Englishmen when full, and Irishmen when drunk for an engagement —
Famine increases the contractility of the Stomach: excitability of the System excites pain in the Stomach, renders the secretion and excretion acrid, produces Hemorrhagy from the Stomach ~~to~~ Delirium and closes the scene with death —
Dr Franklin used to relate the case of a benjamin Says of this city who in imitation of our Saviour to fast 40 days during this time the Dr visited him and found his breath so acrid that shaking hands with him drew tears from his eyes Hogs are omnivorous & eight table
2d Of the Quality of aliments —
of animals which are the following fish were supposed to be the first animal food of men a diet solely of Fish is injurious to health

Food solely animal produces fetid sweat
Scurvy &c and the food of Carnivorous
animals produces this effect produces
this effect in a much greater de-
gree than the food of Granivorous
There is a great difference between
the effects of wild and domesticated
animals the former being much
more wholesome The Indians
who live wholely upon wild an-
imals are exempted from
almost all the diseases to which
we are subject they are however
not so strong but more active
than those who live upon do-
mesticated animals animal food
produces diseases when much exer
cised before killed an instance
of this occurd a few years ago A
farmer killed a beef after working
him very hard and sent it to
market the result was that
of 18 persons who ate it 14 died

2 Vegetable aliments notwithstanding people living in warm climates live upon them yet in other climates they produce disease & that wholly vegetable produces diarrhea dysentery dropsy costiveness and disposition to gout It lessens the heat of the human body in fevers the venereal appetite lessens the size of the human body and some are supposed to act specifically upon the system as beans which produce flatulency hence Pythagoras forbade those the use of them who came to his school Oats are said to produce cutaneous diseases and chestnuts when green are said to produce mental debility many other circumstances independent of the quantity & quality of food influence their effect upon the system

1st Preparation of food by cooking materially change its digestibility

2d Food when taken into the stomach without being sufficiently masticated produces dyspepsia

3d Too great intervals between the meals disorder the stomach this should be avoided by carrying a little gingerbread or biscuit to eat between meals

4th Exercise or rest influences the food in the stomach the former rendering food harmless the latter more healthy when vegetables are used some philosophers of late have ventured to predict in process of time that vegetable food will be the only nourishment of man

5th Eating to much after fasting is a great source of disease In a convalescent state the worst relapses are brought on by eating too much or by eating animal food after being restrained to a low vegetable diet

This is one of the greatest sources of unsuccessful Practice when families in Europe travel for health they are sometimes attended by a Physician who regulates their diet chefs drink &c The benefit derived from such a custom is considerable

The sudden change from vegetable to animal diet & vice versa is very unfavourable to health (See med. & Jn. Vol 1) however it is best to allow pat. labouring under chronic diseases to eat one dish only at a meal

& the Food taken into the stomach too hot or too cold produces of that viscus Mr Reed died at New York in consequence of eating Ice cream

6th Novelties in articles of diet often produce diseases and that to when the diet is taken small quantities Watermelons Peaches &c are not received into the System in the

Season without producing some complaint and symptoms that are unpleasant and some times diseases it seems in this case that the stomach repects her old companions but upon recognising them ~~again~~ renews her cordiality with them again the stomach sometimes remembers her enemies for a long time and scarcely ever becomes reconciled to them some years ago a single boiled chestnut produced a vomiting in my own person owing to great sickness I experienced ~~[illegible]~~ from them when young

10th Food may remain a long time on the stomach without showing its pernicious effects I once knew a young lady taken sick the third day after being taking ~~[illegible]~~ a small quantity of toasted cheese and by discharging the offending matter she soon found relief

Dr Waller says he once knew ~~an~~ in-
stances of the food remaining on
the stomach from one week to 7
months and perhaps longer previous
to the attack of the disease

11th Diseases may be brought on by
cooking food in improper vessels
as copper lead &c Since the introduc
tion of silver and iron vessels stomach
complaints are very much diminished
in number Stomach complaints
are also produced by filth and ex
traneous matter getting into the
vessels used to convey food into the
system I once knew a whole fam
ily to get sick in consequence of
a spider getting in to the basin
~~of~~ milk which was eaten by them

12 Animal food has sometimes been
rendered unhealthy from a peci
liarity of diet on which the animal
had been fed for some time pre-
vious to its being killed Some fam-
ilies in Philadelphia

were diseased in consequence of eating
Pheasants which were brought to
to market the Physicians unani-
tally ascribed the cause I have
mentioned to the complaint and
these animals were condemned to
be improper & poisonous The
cause was however that the
pheasants had lived upon a poison-
ous fruit called laurel-berry which
was the only fruit they could get
in the winter and which is
known to give a temporary poison
to ~~these animals~~ flesh of these animals
as well as to the deer & some others
I once knew 60 Students at Princeton
College to be effected with diarhea
by eating a Pye made of Pigeons
that had subsisted upon poke berries
Salt that when well proportion to
the state of the system is not
unhalesome the reason why chil-
dren in the county are less effect

with colica infantum than those in the city is I believe owing to the salt food being used by the former whilst the latter from their peculiar situations are precluded from it and are obliged to live upon fresh

It is to be wished that our farmers would live upon fresh meat in the winter and salt in the summer

14 There is an ~~Idiosyncracy~~ ~~Idiosy~~ Idiosyncracy which renders wholesome or unwholesome

Of Condiments

As productive of disease

1st They are Salt Vinegar Sugar mustard and Spices

1st of Salt this is universal and use full an article of diet that when it could not be obtained that ashes and Alkalies were substituted frequently in its stead

Some nations as the Brazilians and Indians have never used salt but in its stead alkaline substances

2 Vinegar is both wholesome and proper in small quantities but when taken in large quantities produces dyspepsia gastroenemia colic disposition to gout and a variety of other distressing complaints In 1770 it was said to take down the fat of the system and induce leanness some of our ladies then used it very profusely and injured their constitution materially by it

3d Mustard the same may be said of this as of Vinegar I had a gentleman and lady under my own care with a very obstinate gastroenemia and happening to dine with them one day I observed that they used mustard and vinegar very profusely I advised them to lessen the quantity of these two articles

4

They died so and soon recovered Pat.
often suffer from large quantities and
peculiar qualities of food Dr Zimmerman
informs us that Frederic II King of Prusia
fell a sacrifice to his ungovernable
appetite he was an enormous glutton
he always eat between breakfast and
dinner and all pye by way of relish
he never could be convinced that he ate
too much and when spoken to about
it he would observe that he only took
sufficient to keep soul and body together
he was remarkably fond of condiments
and the same Doctor informs us that
his kitchen at 72 resembled an apothe-
caries shop more than any thing else

4th Sugar notwithstanding it is the
most nourishing and grateful of all
~~aliments~~ condiments when taken
in moderate quantities yet when
taken in excess produces dyspepsia
Honey and Molasses when taken in
excess produce diseases

5th Spices when taken in small quantities promote digestion but when taken in large quantities have a contrary effect we will now turn our attention to the effects of Tea & Coffee a revolution has taken place in the custom and manners of every nation since the introduction of these articles

Tea principally injures by being to strong hence kitchen women are more effected by it than their mistresses It will sometimes prevent and sometimes bring on sleep if the system be below the sleeping point then its stimulus may produce sleep but if the system be above the sleeping point then it prevents sleep Tea produces nervous complaints such as Hysteria &c when taken very strong by and in large quantities gout hence ~~has~~ women are more effected with that disease than men as 11 to one in proportion

Coffee is a gentle stimulus and will sometimes produce all the effects of ardent spirits I knew a physician in this city who previous to his going out on a visit to his pat in the cold always drank a pint of hot coffee It sometimes produces vertigo and other diseases in consequence of which I would forbade its use in any of those diseases Neither Tea nor coffee are nurishing they only become so in consequence of the sugar and milk they contain or rather when with them

Drinks as productive of disease are water wine beer and ardent spirits

1st Water is the most pure and wholesome of all ~~drinks~~ those drinks but like the others it is sometimes productive of disease

It is sometimes the cause of disease by its sensible qualities Water very cold is injurious to the bone of the stomach by its sedative effects

When the system is very much heated violent spasm arises from drinking very cold water in the stomach the teeth are particularly effected by very cold water No 8 Dentist of this city supposed he drew three teeth in the summer to one in the winter which may be ascribed to this cause water moderately warm or suffered to stand in the air for half an hour never produces those dreadful consequences which are sometimes produced by taking it too cold because this last by abstracting so much of the heat of the stomach leaves the system debilitated in consequence of which the system reacts so powerfully that fevers are produced and water is again required to compose the fever where as water not very cold produces no bad effects since the system does not react and no fever is produced therefore cool water quenches thirst better than very cold

2nd By being mixed with unhealthy
Particles Water in Cities is generally
unhealthy from the following reason
That the pipes in necessities which
are dug 30 or 40 feet below the surface
of the ground generally effect the pumps
or wells at the distance of 20 feet
from them It was on this account
that Dr Franklin proposed supply-
ing the city with water from the
~~Schuylkill~~ Schuylkill Ice in
water beer Porter &c will produce
disease but not wine and ardent
Spirits I have known a case of death
Brought on by drinking Ice water
water is most wholesome when running
over beds of sand and gravel
7th By the quantity and time it is
taken Cold water when taken in
an improper time injures the system
the same may be said to
take place when used in large
draughts many people injure them
selves by taking large quantity of water

in the morning and late in the evening just before going to bed This practice is induced by intemperance and kept up by habit It is pernicious as also that of drinking between meals

The Indians hence by ever use water untill the evening large drinkers of cold water are generally great eaters

2d Wine has a great tendency to produce gout in the extremities here I must observe that gout in the extremities is always produced by fermented or spirituated liquors gout in the stomach may be produced without them but I never knew a case of gout except in persons who had been accustomed to their drinks Wine produces gout in warm more readily than in cold climates It has a tendency to produce costiveness when taken after supper wine is more holesome when taken with food than without it

3d Beer like wine when taken in large quantities produces gout and sometimes disposes to Rheumatism

It has been said to produce gravel if so it is in consequence of its acidity Dr Waller says of 100 persons who died of gravel not one upon examination had been found to use beer

4th Cider may be drunken with impunity by labourers but produces gout and Rheumatism in persons of sedentary habits I knew a gentleman & lady in whom the gout was always excited by it The fruit from which it is obtained is sometimes difficult of digestion in some stomachs is productive of that complaint If a red hot iron be thrust into the cider and suffered to cool its tendency to gout and Rheumatism is destroyed the iron acts by abstracting the acid

5th Ardent Spirits is a drink which proves a great source of disease (see med Jur.) It may be proper however to mention here that the effects are experienced in the nerves

Blood vessels Lymphatics brain &c
and also upon the moral faculty

6 ~~th~~ Dress as in every disease here would be here ~~that~~ The dress first used to cover our nakedness after our fall from primeval innocence would be so used as in time to constitute a part of our distruction The diseases arising from dress or the prevailing of fashion & quality of our clothes

1 Dress too heavy in warm weather predisposes to disease

2 Fashion is often a source of disease by dressing too thin thick or tight I knew a lady who fainted immediately after she was dressing to go to a tea party from being laced too tight in her stays I believe a great many diseases of the brain are brought on by tight ~~stays~~ Corsets Shirt collars &c

Garters by preventing the free return
of the venous blood would cause
cutaneous legs &c
3d Quality of clothing has great influence over
the system woollen or cotton clothing is
best next the skin woollen cloths has
many advantages when worn next the
skin
1 They keep up a gentle perspiration
2nd When wet they are not so disagreeable
so cold nor so productive of disease
3. They may be worn any length of
time next the skin wash out producing
vermin provided the other cloth-
ing be kept clean after having con
sidered the disease of dogs let us consider
the dogs of disease for there is a reason
1st Hair powder is a dog of disease
as it was first put on the head in
Palmer to prevent the disease called
Plica Polonica which is peculiar to
that country in a great measure
2d Packets on the face were intro-
duced into use by churchmen to hide
the pimples of that part
3d Neck-cloths were first introduced
into use by Henry

to hide the deformity occasioned by scrophula boots were first introduced by Charles to hide the deformity of his legs

Poisons are of a relative nature from the seat they effect as the poison of the viper ~~or the poison~~ is innocent when swallowed some substances are poisonous to particular animals while they are food for others or they are poisonous to one animal in one state of the body while in another state of the same animal they are innocent

Poisons are such

Poisons are such substances as when taken into the system produce disease ~~and~~ or death and that they act retetively is proven by the following fact The venom of a spider has been swallowed without any injury but when taken into the blood vessels it immediately kills a small dose of Opium is an agreable ~~stay~~ stimulus but if taken largely it kills

Poisons are taken from the animal vegetable mineral or animal kingdoms it belongs however to natural history to point out to point out the poisons it is my province only to explain the manner in which they act poison like Miasmata acts like by inducing local inflamation the bite of a spider does not kill by its poisonous quality but by producing morbid excitement and inflamation and then bringing the rest of the system into sympathy with the part effected

2d Of the Vegetable kingdom we have poison as the Nicotiana Cicuta Hyoscyamus Vigitalis Datura Stramonium Lauro Cerasus Mons hood and Dog wort Buckwheat so nutritious to men is poison to some animals others are less dangerous as the Chesnut when acts upon the skin

3d Mineral poisons are arsenic &c
4th Animal ~~wounds~~ Animal and Vegetable and Putrescent wounds and the different kinds of winds unfit for respiration

Poisons have been supposed to act by destroying a certain something called the living principle but since we have denied the existence of such a principle it becomes us to account for it another way we said that the functions of the system were kept up by certain stimuli acting thereon in short that life is a forced state and consequently we account for the operations of poisons by their destroying the parts to which they are applied and thereby destroying the ability of the system by destroying its various functions

They produce this effect in the same manner as a string tied around a bell or a piece of wax tied around the string of a violin prevents the emission of sound from either of them

Poison acts specifically

1st On the mind
2nd On the brain
3d nerves
4th On the muscular system
5th On the lymphatics
6th On the sanguineous system
7th On the skin
8th On the bowels
9th On the lungs
10th Generally on the whole system as Opium

Chemistry offers us examples in support of our doctrine of poisons

Mercury put upon gold destroys its ductility and malleability Zinc and copper are both wholsome themselves innocuous but when mixed

mixed produce a fine brittle sonorous and elastic compound or alloy many other examples of like nature might be adduced from Chemistry May not poisons act on the blood by mixing with it and destroying its irritability

Formerly we looked upward ~~for~~ towards monarchs for power but lately we have looked down & found it to reside in the people and since that time we have become more wise and happy but not so in medicine we have all been looking upward for some invisible principle of life but the theory I have delivered directs us to seek for it from external causes since this theory has been advanced the phenomena of animal life seems more plain and simple we must now look outward for the support

support of animal life and like the Indians with their gods think we see them in the clouds and winds
There are some poisons which do not destroy life immediately they are generally from the vegetable kingdom but by a lingering illness destroy the Pat. shrivel him slowly as it were out of the world this is the way I explain the operations of those ~~medicine~~ Poisons used in the Southern States by the slaves to extinguish the lives of their masters
The Miasmata which produced yellow fever sometimes kill immediately but it may never thelessly and often does bring on chronic diseases there have been frequent instances of persons who had been poisoned arriving again to proper health

even arsenic itself yields sometimes to the efforts of the system to restore itself

Foreign Matters introduced into the system as productive of diseases

WORMS from their universal appearance in all animals I am led to ~~suppose~~ believe serve some purpose in the human body and when diseases are produced by them it is either by their being in too large a quantity or by their getting into some improper place they are found in almost every part of the human body in the liver bladder ~~throat~~ frontal and maxillary sinuses. Brain and alimentary canal the different kinds of worms are

The different kinds of worms are Lumbrices or round worm the Tenia or Tape worm ascaridies and the ground worm these are either taken into the system with aliment or generated in it I am induced to think that the lumbrices only serves a good purpose in the system and this may be by consuming the superabundant aliment The effects of worms are seen more in the fall than at any other season children are more subject to them than adults some Nations are more subject than others The French Italians and Germans than any other nations worms induce disease only by their quantity or by being misplaced they have no effect upon the blood vessels I deny the existence of worm fevers

From what I have delivered Gentlemen you may think that I believe there are few diseases

resulting from worms I would by no means inculcate such an idea ~~I believe there are few diseases~~ I believe there are few diseases attending children that are not owing to or accompanied with worms I seldom therefore give medicine in chronic diseases without having an eye to worms

Of D

Substances or extraneous bodies which being introduced into the stomach lungs nose skin &c produce disease I have known death to be produced by swallowing a cherry stone copper taken in to the stomach produces dizziness nausea &c I knew a lady who swallowed a watermelon seed a violent coughing ensued which ceased as soon as the seed was discharged which was much enlarged Children frequently have grains of copper &c up their nose the consequences of which are

often very bad since they tend to bring on Polypus &c

Pins often produce disease by being introduced into a part and not immediately extracted I attended a case with Mister Morris where there was a sore in the groin which would not be benifited by any application untill a pin was drawn from it and then it healed immediately A lady in this city had great pain in her Vigina for sometime She however discharged a pin from that part and was brought to her usual state of health Wounds from nails especially in tendonous parts often induce Tetanus

Shot Bullets & Powder frequently induce disease often remaining in the System some time I knew a young man who had delirium every two or three years untile a pin was discharged which had been lodged in the bottom of his foot

when young Splinters are often
the cause of fever, diseases &c I attended
an officer about the time of the revo-
lutionary War in consultation
with another Physician this officer
was effected with a pain in the
leg we both agreed that he had the
gout and treated his complaint as
such some days afterward there
came from the seat of the pain
a splinter about the eighth of an
inch long which had been thrust
into the foot some years before
Paints Powder & Pomatum
are frequently productive of disease
such as headach &c
Retained excretions are frequently
productive of many diseases
Feces when retained any length of
of time are very injurious their
effects are however different in
different persons many people
go a considerable time without
any discharge of feces particular
by sailors I knew a sailor who

who went from Philadelphia to Lisbon and returned without one discharge of feces during that period Dr Hallen believes the longevity of birds to depend upon the readiness ~~of birds~~ with which they discharge their feces There are many instances of of persons going a week a month and even ~~a year~~ more without any discharge that in general it disposes to many diseases first Jaundice from Dyspepsia and other gastric affection

2. From the Piles in consequence of the feces hardening in the intestines

3. The Colic

4. The Inflamation of the intestines by their irritation

5. The Ruptures in the venereal Scrotal Umbilical &c

6. The disease of the brain the most healthy time for evacuating feces is once in 24 hours but this period may be exceded

for a short time and no disease be induced

Perspiration when retained produces dysenteries & eruptions of the skin sweating colic diarrhea cholera &c

Urine long retained will produce calculus Tenesmus &c

Bile when absorbed produces costiveness Jaundice inability discased or faulty vision making every object appear yellow obstructed or schirous liver

The causes of them are obstructions which are brot on three ways

1 Spasm

2 Calculus or gall stones

3 Viscidity as in yellow fever

Semen when retained how does it produce diseases I answer it does not unless accompanied with a preternatural strong venereal appetite then it may produce plethora

Menses when retained produce a majority of female diseases whether of the chronic or acute kind the suppression of the menses produces diseases of a highly inflammatory kind women stand in need of the lancet not of Pennyroyal tea or other stimulating medicines termed immenagogues

Rest & Motion as productive of disease by suppressing perspiration is unfavourable to health hence the necessity of imposing labour upon man after his expulsion to earn his bread by the sweat of his brow this was a blessing in disguise women suffer less than men from a sedentary life

Sleep & Vigilence too much sleep produces debility from abstraction and disposes to fatness indigestion fatuity &c

Six hours in the 24 are sufficient to sleep Westby who lived to 80 seldom slept more than 4 in the 24 wakefulness is a relative term and depends on stimulus both as to quantity and quality the stimulus of the passions will often prevent sleep without producing any injury I knew a cand Player who could sit two or three days & nights without feeling any inclination to sleep and Haller tells us of a woman who passed 45 days without sleep the want of sleep is sometimes owing to the debilitating passions as grief fear &c and they act by reducing the system below the sleeping point but above all wakefulness is kept up by fear this state of wakefulness is exemplified in the anecdote of gen Washington & the Indian corn planter

your words contained in your great paper you sent me were like the sun in the morning to a poor sick man which makes him glad but does not cure the pain We come now to an important part of our Pathology

The diseases arising from the intellectual faculties & venereal appetite

a gentle exercise of the faculties of the mind is favourable to health but intense thought brings on debility

1st. When too long continued or at improper hours thus people who sit late at night are seldom healthy and the midnight for this reason should be avoided

2d It produces debility when the subject is disproportionate to the abilities of the person

59

The Passions are divided into stimulant and sedative the former as hope Joy &c act positively the latter as disappointment & negatively these passions are divided into chronic and acute or in other words into passions properly so called & emotions sometimes the passions are mixt and then they are productive of different effects as ambition with Fear &c

Love produces different effects according as the person is successful or on the contrary those who are disappointed in love always love stronger

Of Love produces different effects according as the person is successful or the contrary Those who are disappointed in love always love stronger after it if at the time of their being rejected there is not something that will have a tendency to affront For this reason Dr Gregory in a legacy to his daughters tells them when they were addressed by a man whom they did not intend to marry to give a repulse in positive terms in order that he may have no hopes of future success Unsuccessful love produces Hypochondriasis Hysteria Melancholia &c

Joy is a powerful stimulus & will sometimes produce Syncope & death The door-keeper in the House of Congress at the time of the american revolution was struck suddenly dead with Joy when he heard of the capture of Lord Cornwallis when Joy does not produce Death a great depression of spirits often follows and sometimes suicide Joy is greater when the excitability is accumulated by previous Fear

Anger is a powerful stimulant it increases the flow of blood with. many other uncommon emotions of the system and will even produce death A Shoemaker of this city died of anger because could not avenge himself on a parcel of boys who blew tobacco smoke thro a hole in his door also a man while complaining to his tax gatherer fell dead

Grief acts like a slow poison on the system it is one of the worst of sedatives it produces Dyspepsia Loss of appetite &c Grief when excessive will prevent a flow of tears there is a point of grief that may be called the weeping point above or below which tears will not flow tears flow when the excessive grief has descended to the weeping point hence Hypochondriacal patients are so much better after a flood of tears

& it seems to approach to Hysteria persons under such grief sleep sounder than at any other time

Fear when excessive produces a quick pulse dryness of the skin asphixia or debility Mania suspension of labour pains and death fear causes the hair to rise on the head and sometimes to become white in one knight there was an instance of this taking place by the fright of an earth quake which destroyed Lisbon in 1755 It acts also on the mind & sometimes anihalates the desire of life speech gives energy in time of fear hence boys when under fear talk about any thing else in order to banish it & produces debility & accumulates excitability hence the reason why cowards sometimes perform great exploits

Terror is a compound of fear and anger ~~envy~~

Envy acts like a perpetual blister or Fyre

Ambition is an inflamatory fever of the mind & has great effects upon it A Minister in Sweden died of a colic in consequence of being deprived of his office

Avarice Many have died to use the common expression indebted to their back and bellies It abstracts from us the love of our country neighbour friends relations servants wife and children and last by ourselves

The following Epitaph was written upon the tomb stone of an avaricious archbishop of Canterbury

"Here lies his grace in cold clay clad
"Who died in want of what he had

It is only by the knowledge of the passions in a simple and compound state that a man can have any influence over the minds of others

The Venereal Appetite when indulged legally and religiously seldom injures ~~It~~ injures when done by persons either too young or too old the old are not effected unless they have young wives and husbands when an old man marries a young wife he expiates the folly by his death It injures by medicine operating on the organs of generation - as can thereby also when grafted by the detestable practice of Onanism ~~[illegible]~~ When in excess in married men it is relieved by sugar of lead salivation or a low diet In women this produces Fluor Uterinus the diseases are Dyspepsia gonorrhea Phthisis Pulmonalis &c Different Situations as it respects health. I formerly mentioned the diseases of Society which are divided in to Savage Barbarous and Civilized all of which have their different diseases as men advanced in civilization fevers diminished and nervous diseases take their place

Different Governments in monarchical governments there is less sensibility than in constitutional or republican the reverse

Different Religions the doctrines of the christian religion are more favourable to health than any other

Different employments

Farmers are generally healthy carpenters are generally long lived because they work in the open air fevers are more common to those two classes and scurvy to sailors coach-men are subject to catarrh and other diseases for this reason that they are frequent by detained rooms in the cold waiting for their masters and mistresses Weavers are particularly subject to such diseases as Dyspepsia Hypochondriasis Hysteria costiveness &c

The posture of shoemakers and tay-
lors invite to disease Bakers from
their living in damp cellars and
from being exposed to the dust of
the flower are subject to pulmo-
nary diseases From accurate ob-
servation made in the city of Lon-
don the average life of bakers was
thirty years Smiths of every kind
from their exposure to heat and
cold are subject to inflamatory
diseases Studious men are subject
to Dyspepsia and headach hence
the former has been called morbus
studiorum Judges are subject to
calculi from their long retention
of urine & lessimen to Dyspepsia
Graves & consumption Lawyers and
Physicians are less subject to the
diseases peculiar to the other classes
of men because they blend together
the exercises of the body and mind
unity Physicians from their excess in

country Dyspepsia from their excess in riding are subject to costiveness piles fistula in ano Rheumatism gravel &c I refer you to Rumsey's for different disease of the different kinds of tradesmen

Peculiar Customs

as productive of disease there are a great number of diseases which the peculiar habits and fashions of men have given rise to

1st Of their causes is chew-drinking in the morning to act as an antiseptic This pernicious practice arose from the ~~pernicious practice~~ of custom of drinking in the morning for intermittents in low and marshy Place. It creates a paunch the whole day and by the paunch tion for drunkenness

2d The Practice of drinking wine bitters before dinner is a dangerous ~~one~~ Practice if the appetite be good it wants no additional stimuli-

and if otherwise the bitters excite one
to and the power of digestion and will
also harm by bring on indirect debility
and if you should see a Physician with
a rose bud in his face lifting with
trembling hand the bole or cup of sige
to his lips either in a sick room or
tavern and he should say that
he has attended these lectures or was
a pupil of mine tell the world he
is either an impostor or an apostate
this belongs to the old school and
not to the new I disclaim him
I disown him.

3d The custom of women receiving by
in visits the female system is then in
a very irritable state and by no
means able to bear the stimuli of
conversation

4th The tolling of bells for the dead
this has a very bad effect upon
a sick person

7 The detestable practice of chewing tobacco

Different amusements are hurtful to the system from their standing before a fire or under the hands of a hearber in a cold room previous to their going out on a visit also improper change of cloths the air of crowded assemblies dancing &c I knew a person die of a fit of apoplexy when leading down a country dance The theater produces many diseases it excites their passions above the ordinary stimuli of passion and thus by called to the common distresses of life a lady who would shed tears at a pathetic tragedy would turn a pitiable beggar from her door without a thought their at the plays not having vent regurgitate and induce disease unless they do as a stock man who leaped from his box and sword in hand to rescue the distressed

diseases arising from unhealthy
ancestors these are congenial &
hereditary of the first there are
many diseases Measels Small pox
Jaundice Lues venerea Plague
yellow fever &c Dr Rush says in
the time of the Plague at
many children were born off with the
plague which their parents had
2nd Diseases which are hereditary ~~or~~
depend upon predisposition and
form of ancestors consumption
is more frequently derived from
the father and mania from the
mother it is remarkable that
the consumption never appears before
the age of ~~21 or 22~~ 20 or 21 and mad-
ness untill the age at which it at-
tacked the mother when the parents
have been effected with gout half the
intemperance will bring it on
in the children gout hysteria
hypochondriasis & leprosy are all hereda

Hereditary diseases there are family diseases such as Epilepsy & palsy &c. There are many ~~the~~ instances of diseases skipping over the first and second generations and then shewing itself you must not therefore confine yourself to the parents in looking for the cause but you will often have to go back several generations. In regard to the operations of medicines in our ancestors in hereditary diseases is necessary what was good in the same case in the one should also be tried in the other for there are family medicines as well as family diseases. This is of so much consequence that I wish all those who have diseases communicable to children would whenever ~~leave those~~ leave with them the remedies they found most useful

Diseases arising from the improper use of Medicine they have arisen chiefly from the ignorant confidence of false systems of Medicines and many Ocean of their Operation The false systems of Medicines from Hypocrates to Brown in the hands of weak Physicians have slain their thousands and tens of thousands That Physicians will have the most success perhaps in Practice who know a little from all the systems Many thousands have died in consequence of Dr. M. Clain on regimen by living on a diet so low as not to be adequate to the support of life from taking Opium upon a supposition. that it was a Sedative according to Dr Cullen from a confidence of the asthenic diseases of Dr Brown But think not gentlemen that I do not hold out for a theory in medicine because of the apparent false theories

for there have been and are yet many false theories in medicine wh have done much harm but we ought not intirely to reject intirely the truth of theory in medicine on account of the apparent spurious ones no more than we ought to reject the true religion be cause there are many false ones in the world The injudicious confidence of the operations of nature is also the cause of many deaths this injudicious confidence is quite as absurd as to believe in witch craft or animal electricity one grand argument in favour of the operations of nature is that she is the only Physician of the brute creation but this proves too much for brutes seldom recover from sharp diseases such as we could cure by the application of a few simple remedies but even in this enlightened age nature seems to be the Pagode of many Physicians

If the regular Physicians have done harm by the means just mentioned how much injury must have been done by Quacks!!

Quacks & Mountebanks

I once heard a dialogue between a sword and a rum hogshead discussing which had done most in the destruction of mankind should a representation from the Quacks Stept forward he would have gained the palm with ease

Diseases arising from the imprudent or habitual use of medicines with or without the advice of a Physician

1st Purges these never given too often disposes to costiveness & thereby require their more frequent exibition different kinds of purges disposes to different kinds of diseases

and do injury to opposite parts of the body also dispose to piles bitter ~~nut~~ pills dispose to vertigo and heady and Glauber salt to the bilious of the intestines purges are ~~good~~ often given to prevent eruptions but abstinence ~~would be an~~ from animal food would be much better

2d Cosmetics The habitual use of them produces dyspepsia as also other complaints of the stomach and by that means affect the whole system they produce eruptions of all kinds

3d Bitters induce indirect debilitys Dyspepsia and cetera and dispose to dram drinking &c exercise is the best of all tonics with a well regulated diet ~~Bitter~~

4th Nitre has produced Dyspepsia and colic

5th Opt used in the Spring without disease induces Plethora & Apoplexy abstinence in the Spring is more to be recommended

6th Sudorifics habitually used injure the system

7th The imprudent use of cold & warm baths dis pose to many diseases but when the warm bath is used in the predisposing state of fever it is a valuable and excellent remedy

8th Pediluvium when indiscriminately used often does harm at least as often as it does good in predisposition to disease it has done immence service but when morbid excitement prevail it produces delerium and increases every symtom of disease a pint of wine will do as little harm when the disease is formed a Pediluvium

9th Drugs and diets suggested only by false theories of medicine produce many diseases
10th Quack medicines of all kinds have filled the bills of mortality Thus Godfrey's cordial has destroyed many children I have seen it once destroy a child in this city Farrington's balsam has produced inflammation in the bowels and even death even the so much famed Portland Powders have done considerable mischief but sometimes medicine does neither mischief nor good it appears to do neither good nor harm in the beginning and that too in the hands of industrious Physicians this arises from peculiar idiosyncrasy in certain constitutions hence you may see the uncertainty of blamming you have then too suddenly

Sympathy and antipathy as ~~cause~~ in curing diseases This Gentlemen is a ~~difficult~~ difficult question that Sympathy should exist in the mind is easily imagined but that it should exist betwix bodies seems unaccountable for upon the consideration that man is an imitative animal This principle of imitation is a deep seated principle in the minds of most men it is to this Propensity yawning & gaping when one so infectious in large assemblies To this I like wise upon the sore eyes that sometimes arise from viewing those of other that are sore even convulsions have been communicated by sympathy also stuttering and the hicks as they are called but how shall we account for that intuitive evidence when some people have in finding out

events to which they are entire strangers as to any external cause Dr Johnson says that ~~Lord Bacon~~ Lord Bacomon while a boy at school in France when at Joley was suddenly impressed with an idea that his father was dead who was then at the distance of Bosellie from him time it was and his father died precisely about the time that the idea struck him

Antipathy is often sympathetical and acquired Some men are born with an antipathy to water as Peter the great King James was born ~~with an antipathy~~ to a sword and others to cats dogs rats &c I have heard of a man who could tell when there was a cat in the room even without seeing or hearing it this must have been

This must have been owing to certain effluvia emitted from the enamel he heated

Diseases arising from association & motion of the former it is well worth attending to there is scarcely a disease in which this association is not present of the latter they are numerous

1st If a man accustom himself to making water just before going to bed he will be sensibly affected by omitting it once

2 a lady who took snuff properly was attacked with palsy and was incapable of raising her hand to her head which she could do if vol: alkali was applied to her nose these two facts are sufficient to prove the power of association

Of Motion It is by this association I account for the periodical returns of the paroxisms in intermittent fevers and that

it is so is proved by these persons being prevented by exciting action or a different mode of association in the system thus riding on horse back cures intermittent by breaking the chain of association Salivation and travelling have had the same effect in Epilepsy

Diseases from accidents

I have seen Hydrocephalus induced brought on by the stroke of a hammer on the head thirteen before and another of the pain of the eye in a man who had frequently been raised by the horn when a child A. W. Campbell was rendered maniacal at the age of 23 by the kick of an horse which he received at the age of 13 you see here that we have to go back days weeks months & even years for the remote cause of diseases

(vide Bells Surgery for diseases of this kind) I shall however mention such facts as have occured to me ~~the~~ since their publication

1st The State of the Stomach greatly influences longevity the signs of an healthy Stomach are appetite and an ignorance that we have one

2d that we hear no more of the food after we swallow it

3d Migration influences the approach of death old persons frequently prolong their lives by migrating from a northern to a southern climate

4th However long some people live few die of old age it is computed that only 6 out of an hundred live to 60 years

5th More women live to be old than men but more men to be very old than women

Predisposing Cause of Disease

These are either natural or accidental
The latter occur in different ages and
conditions of the system

1st in infancy these arise from
the disproportion of the head con-
sequently the greater disproportion
of blood to that part hence congestions
upon the head behind the ears
Hence cerebritis & apoplexy Hydrocephalus
Convulsions &c Infants have also less
sensibility and more irritability
than adults hence they are more
disposed to contagious diseases of
the bowels stomach &c Dentition not
only produces painful and swel-
led gums but convulsions, diarrhea
&c and many other complaints
I have also seen it produce swel-
ling of the inguinal glands &c

Gonorrhea tenderness of the skin
worms Passions &c

all become the sources of disease in children It is computed that one half the children die under 7 but certainly under ten years

2 Childhood & Irritability the diseases of ~~children~~ infancy are nearly applicable here excitability still predominates over the sensibility

3 Puberty in this part of our life sensibility begins to get the upper hand of irritability here febrile diseases of an inflammatory nature begin to take place & Phthisis Catarrh Dyspepsia &

4th Adolescency or manhood takes place at about 16 & continues till about 36 the diseases of this part of our lives arises from the determination of blood to the organs of generation they are diseases of the stomach Dyspepsia Hypochondriasis Hysteria pains in the stomach

swellings in the neck and gross
fullness in the head & which
arises from the venereal appetite
from the 36 to the 46 the venous
plethora prevails over the arterial
From the 46 to the 57 there is
better health more steadiness and
fewer deaths than at any other
period the excitability and
excitement being more equally
proportioned than at any other
time

But old age soon comes on the menses
in women cease to flow & as soon
as an man puts on spectacles he
may be said to put on the
first part of his shroud and when
he rises in the Knight to ~~put~~
his change his tune he may
then be said to advance the
first step towards his grave
from 57 to 63 the system is
predisposed to lyncope

vertigo apoplexy &c From the
60 the system gradually decays
It is then that a second child
hood commences and here again
excitement predominates
This a man who at 40 would
think his bottle of Medicine would
when at 60 or 70 be intoxicated
with 3 or 4 glasses It is at this
period that persons not only be
come a burden to ~~themselves but~~
others but to themselves they
are more disturbed at trivial
accidents and are more sensible
to the changes of heat & cold after
this as the body advances to 80-
or 90 the sensibility of the ner-
vous system decreases and the
excitability of the arterial system
increases and the body is very
liable to inflammatory complaints
Dr Covet & Franklin died of
an acute and inflammatory disease
between 80 & 90 the fluids of old
70

the fluids of old people become acid as the urine gastric juice mucus from the nose &c hence tingling pains often terminate in cancer at this time of life bruises end in mortification hence also muscular weakness takes place hence the shaking of the hands knees head &c

The diseases of old people are chronic and acute The former attends

1st of the blood vessels
2nd Nerves
3 Muscular system
4th Brain
5th Alimentary canal some old men take a pride in shewing their strength by this they not only suffer sickness but some times death few people die of old age

but are frequently said to die of it when this is the case they leave she would without pain and death is no more than a sound sleep Dr Priestly told me his father died of that alone he was sitting in his armed chair and the last words he uttered were "I feel no pain whatever and with these words breathed his last

Condition of the system in single and married life as predis to disease Married people are generally longer lived than single people are more subject to Hysteria Or women are subject are subject to disappointment in love men are often diseased after marriage but this is not the case with women Barrenness is often a cause of disease ~~in women~~

I once knew a heiress lady upon seeing a pregnant beggar standing at her door who said I would see that beggar wash all her rags provided I would be come pregnant Bachelors live a hypochondriacal ~~life~~ life It has been said that a Bachelors life is a good breakfast a tolerable dinner but a very bad supper pregnant women are subject to many diseases the consumption is suspended by pregnancy because the inflamation of the Uterus is in such a state is to take the determination from the lungs but when the Uterus is retired from its distention many other diseases may arise from the obstruction of the former Fluids of distention pregnancy predisposes to costiveness

menia Vertigo & sucking children
to consumption and suppression
of milk to women there would
be but few cancerous Uteri. if
Vy. were more used about this
time of life
Deformities in size or the con-
gestion of the whole or any
part of the body predisposes
to disease people uncommon
ly large or small are apt to
be short lived very tall men
according to Dr Darwin seldom
live more than 27 years Dwarfs
are generally short lived the fol-
lowing is an exception the
Dwarf that was brought over
from Germany in the reign
of George the first lived 80 years
those who grow very fat before
40 are generally short lived
large heads and short necks
dispose to Apoplexy
75

narrow chests to diseases of the lungs
Morgagni says deformity of pelvis
other parts disposes to the venereal
appetite women suffer by pram
deformity than men congenital
weakness of a part of the body
disposes to disease the present
King of England is only a 7th
month child but in consequence
of his temperance he has held
a long reign of all the parts of
the body the stomach liver and
spleen is most susceptible of
disease This gentleman bases
his on Pathology I hope an
respect there is but one disease
and that is morbid excitement
but one predisposing cause
debility but one exciting cause an
irritant having finished our Journey & suppose we proceed to
one which is more agreeable by

Therapeutics & the cure of Dis-
eases previous to which I shall
make a few remarks on the
cause and phenomena of death
the doctrine that life depend on
a vital principle has not only
led to great error in physiology
but has produced corruption
in our language thus we
say a man died insinuating
that he himself has done the
act that is he has committed
suicide the original words in
the Hebrew are correct
they are literally translated be
"is dead" and in the latin
morbus est but we say he died
of or the seven causes of death
I refer you to my Med. In-
having made these preliminary
remarks I proceed next to observe
that death occurs from any of
these causes it is generally

produced by one accompanied by ~~one~~ morbid excitement in some part or other

The ~~bubble~~ remains of excitement in these cases ~~[illegible]~~ flies to every part of the body and seeks every hiding hole until at last chased out of the body

It first goes to the brain where it discovers itself by the increased powers of the mind. at such times Pts are remarkable for segonity which never characterizes any part of their lives I knew an old woman who just before her death acquired a wonderful talent for rhyming her confession to her attendant consisted of nothing but one assembly of verses There was another lady in this city

There was another lady in this city who discovered a talent for singing she was incessantly at it and may be said like the swan to have sung her life away Xenophon makes Cyrus say just before his death this
It is to Die —

appeared most divine
The passions are also at this time much increased hence the squeeze of the hand and the panting lips are much more fervent than had been before observed

2 Excitement sometimes seeks refuge in the brain without increasing the powers of the mind with red and dull eyes &c

3" It sometimes increases the acuteness of the senses and hence the exquisite pain which is sometimes felt from the forehead

This is owing to the acuteness of the sense of touch

4th The excitement flies to the trachea larynx and glottis hence the hard noise shrieks and cries before death on many occasions

5th The morbid excitement frequently flies to the fauces

6th to the stomach occasioning violent effections of that organ

7th To the intestines producing diarrhea &c

8th To the kidneys hence the increased discharge of urine

9th to the muscles hence patients have arisen from their beds & have known several persons in the yellow fever to get up dress themselves walk out and return fall down dead after their return from walking some distance

in these cases no pulse would be felt the excitement of the Blood vessels was intirely concentrated in
10 the Muscles 10 To the arteries hence Hemorrhages and vigorous pulse
11 th To the Lymphatics hence the absorption of water in some cases of dropsy I have been some cases in which the dropsical swellings intirely disappeared just before death
12 th To the Skin hence the morbid sweats which ~~are~~ sometimes precede death It sometimes becomes warm immediately after death I think this may be explained by the law of heat which tends to restore its equilibrium in dead matter But heat certainly is not subject to the same laws in living as in dead matter
13 th This morbid excitement is sometimes transferred to the penis hence the obstinate and distressing priapism which

many people are sometimes affected
with It sometimes occurs two
three or more of the parts above
mentioned at the same time
1st It sometimes alternating effects
different parts in such succession
2d Morbid excitement whether fixed
or diffused is sometimes attended
with great pain
3d It is sometimes stationary at
the pleasurable point of excite
ment hence some people die
laughing the late General Butler
said while dying Oh that I
had a pen and ink that I might
describe the pleasure of dying
General Sinclair said "to die is
not so hard as I expected
4 Death in some cases is not at
tended with pain or pleasure
this depends on the existing
state of the sensibility

5th Death sometimes makes its appearance gradually in three or four days

6th Respiration sometimes becomes voluntary but at last the Pat cannot breath voluntarily from weakness and the mucus in the trachea moving up and down and produces what is called the rattles the Pat rarely recovers after this has taken place when the lungs from extreme weakness are unable to perform as long as the Pat can force it up we may indulge a hope of his recovery

7th The coldness generally begins in the fingers toes and other extremities it sometimes appears first in the wrists in such a case of fever a recovery

8th The internal parts sometimes sometimes become cold before the external hence the cold breath that is perceived before death

9th Death is some times attended with fever

10th The pupils of the eyes sometimes become enlarged at other times preternaturally small before death heat and colour frequently remain and fluctuate for two or three days and yellowness of the skin sometimes come on after death when there had been the least appearance of it before there has been much contention among Physicians about the ultima moriens from what has been said the result of their researches may be easily perceived

life continues longest in those
parts which have been least affect
ed with disease sometimes we
discover a good pulse to the
last so with the stomach-
Brain Intestines Lymphatics
Muscles &c the glassy and
contracted face which some
times succeeds death is owing
to the remains of excitement in
the muscles of the face the
body putrifies sooner when
death has been produced sud
denly the Intestines putrify
first then the stomach mus-
cles &c & last by the brain

Therapeutics

Gentlemen after having considered the remote ~~causes~~ predisposing and exciting causes of disease we proceed to Therapeutics a view of the system in a morbid state with the debility predisposing and following disease the first article in our Syllabus on therapeutics is respecting the power of nature or the vis medica of ~~the~~ Stahl the supposed powers of nature arises from Physical necessity entirely (Wille Med. eng.)

1st There are cases however in which nature cures diseases such as fevers causing a dislike for food for Hemorrages causing a painting and consequently a collapse of the vessels

and in wounds in subsidying bone and flesh

2d There are cases in which Nature is too feeble and weak to do any service as in Malignant fever

3d In others she is not proportioned to the disease as in Colera

4th Sometimes unruly as in Chronic gout Epilepsy Mania Cancer and Syphilis

5th She sometimes does mischief as in dropsy and consumption weaning or wearing herself with hectic fever

6th She sometimes refuses her aid as in amaurosis and Scirrhus

7th She sometimes excites pain than is proportional to the disease as in Tetanus and sometimes more as in toothach & Paronychia

8th Nature is weak in the diseases of Domestic animals

for with them disease and death are very nearly connected especially in Epidemics I am not the first who opposed the operation of nature in the cure of disease Sydenham and Stoll were long ago opposed to it the efforts of nature in the cure of diarrhoea and Pleurisy bear no resemblance to the operation of Opium & the lancet which are our sovereign remedies nature in health is like a man in his senses but in disease like a madman It may be compared in disease to a drunken man in a work room who after finding the door stumbles against it and breakes it down and his existence at the same time in short when you are called upon to prescribe in acute diseases

In short when you are called
upon to prescribe in acute diseases
you should serve nature as a
noisy cat or dog in a sick room
that is turn her out and shut
the door against her in the case
of disease however the operation
of nature should be attended to
but not trusted The bowels of
the bowels be affected and shew a
tendency to carry off the disease
by discharge per anu. this should
be assisted by purges if Hemo-
rrhagy from the nose attend the
disease it will be useful If bow
and eruptions appear on the
skin substitute an artificial
~~Issue~~ disease on the skin if
sweats accompany the disease
sudorifics should be administered
but if sore throat a distortion
to cough attend mercury should
be given to expel the morbid
matter you see then gen[illegible]men

Physicians are to be the ministers
not the servants of nature in
the cure of disease as Hypocrates
has well expressed it one outlet
to a disease should not be deseen
ded upon altho it may be suffice-
cient in a few mild diseases yet
every avenue and outlet thro
which it could possibly pass
should be opened There are some
diseases which should be cured
by cut cauterizations on the
heads of children These should
be cured unless some other mode
be substituted to carry off the
matter The bloody Piles in
old people should not be
cured & unless we substitute
some vicarious discharge should
not be cured even in young
people Intermittents succeeding
palsy should not be cured
Dr Bond advised his memorial

pat. to visit marshy countries
and there by bring on the in-
~~termittent~~ fever as a protective
for mania but this in this case
would have been much better
Gout succeeding mania should
be cherished Dr. M had a young
Lter that was twice attacked with
mania upon the retrocession
of headach old sores and ulcers
should not be suddenly healed
because apoplexy and palsy
frequently ~~and palsy~~ succeed a
sore thus cured unless some nec-
cessary discharge be substituted
Death has often been brought on
by curing sore legs in old feeble
ascites should not be cured by
tapping after it had remained
a long time Habitual sweats
from the feet should not be
~~stopt~~ There are some cases
in which pain should not be relie
ved but they are few
A D

In Epidemics we should pay particular attention to the climate and all local circumstances as the season of the year heat & cold dryness and moisture &c there are no successions of epidemics perfectly the same in different years consequently the practice should be suited to different circumstances and regulated by the natural predisposition habits diet &c and attention ought always to be paid to customs and country from whence the pat came Intermittents when they attack a native of Ireland generally yield to bleeding and seldom yield to the bark alone The particular diseases and longing of the pat should always be attended to In the time of the revolution the soldiers of the eastern States were affected with nostalgia while the virginians longed for salt pork & corn bread

Appetites however singular should
not be neglected neither should the
government. & form of religion
Inherited Predisposition & habitu-
al disease or remedies are not to be
left out of consideration The chronic
diseases and hereditary complaints
you should look back as far as
the second and third generations
whole families are sometimes carried
off by diseases contracted by habits pe-
culiar to themselves Witness Dr Craig's
family of Alexandria all of whose
children have died of consumption
while both himself and wife are
exempt from it and in good
health this was a filial disease
the age of men the state of the
Hemorrhoidal vessels and the
catamenia of women should be
attended to nor should women in
children be overlooked in our visits
to them and prescriptions for them
There are also recent causes of dis
eases which Physicians should also have
in view

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as hard drinking Gluttony debt fault love mortified Pride envy &c These causes should be sought for from their friends acquaintances or enemies & not from the Pt himself Physicians must often look back Months and even years for the causes of diseases The removal of the remote cause will not cure the disease for the Hydrocephalus in terms of children to which worms Prechiness is not cured by the removal of the worms In the treatment of diseases hope as far as is consistent with truth and reason should be infused into our Pts for it is the best ve hicle of medicine and the greatest encouragement that not even ~~the~~ a doubt should be expressed for it depeats the intention of ~~medic~~ remedies The principle of faith should also be extended to hence Quacks so often succeed in the cure of disease

The predisposing cause of all diseases is debility which appears to be a mechanical power in med. There are no diseases perhaps which do not appear to have exacerbations and remissions alternately which sometimes require different & even opposite remedies in the first exacerbations are necessary & in the remissions debility is frequently present and requires the administration of cordials In chronic diseases the pat. should regularly take his medicine It is frequently of very great importance to advise patients to continue the use of their med. even when they feel the best want of them

Debility which is the predisposing cause of disease is not confined to days weeks nor to its primary state for it frequently succeeds disease

In such case the vet should continue the medicine which cured the disease for month and even years

Diseases may be compared to a person the besiegers of which should never be fired unless there be a certainty of bringing on capitulation by storming the place therein contained

The choice of medicine

Formerly they were supposed to be valuable in proportion to their prices but I suppose that all diseases may be cured by a few medicines which being better known will be more certain in their effects An advantage frequently arises from an ignorance of the names of medicines. With respect to the operation of med= two opinions have prevailed one is that they act more certainly in their simple forms

While others contend for the advantage of combination both these opinions appear to be reasonable but Opium &c are generally best when exibited in a simple form While Sugar &c enables the stomach to bear medicines which it would otherwise reject in this case a weak pleasurable sensation overcomes a powerful disagreable one Bark and Valerian will cure certain headaches but if administered seperately will avail nothing ~~Dr Todd~~ ~~speaks for the administration~~ argues for the advantage of combination of medicine and says ~~that~~ Allum is a greater astringent when combined with rose water than otherwise Dr Hunt also contends for the combination of medicines and says ~~that~~ some medicines are strengers and enemies to the system and should not be introduced with

with out their guides or Squills
and Gum Ammoniac afford a better
pectoral than either of them would
separately Tar. Anti. & Ipicac. form
a better emetic than when given
seperately Cayenne and pepper
give no pain to the stomach as
when seperately

Wakefulness & Cleanliness should
be strictly attended to in the prepa
ration of our medicines writing
the name of a pat on a medicine
should always be done drawing
the mind from itself or in other
words drawing off the attention
of a pat from his disease is very
beneficial Dr Caldwell & Co
very successful by this practice
he once by his great humane me
rented a man from committing
suicide the tone of conversation
should be suited to the state of
the mind

hence Quack is sometimes benefice and sometimes hurt full attentions high priced medicines to those who are not able to purchase them should be carefully guarded against Physicians should never advise pat to make their wills for they might as well pass sentence of death upon them but they should always inform the friends of the pt of his danger that they may be prepared

Concerning the Operation of medicines there is more fallacy in the opinion on this point than any other Dr Forbyce says the best effects of medicines is to produce a relaxation of the skin whilst Dr Cullen thinks that nausea is of greatest advantage since we reject empiricism we must always prescribe for the symptoms of the dise

As consultations may be useful in some diseases we will sometimes be resorted to on that occasion

1st by them sharpens them to will the opinion of one Physician assist that of another

2d The novelty of two or more Physicians may inspire hope and increase confidence in the mind of a patient

3d Responsibility is divided between the Physicians

Cases in which Consultations are necessary

1st The doubtful cases

2d The dangerous tho not doubtful

3d The Uncommon cases

4th The desperate cases

5th When new medicines are supposed to be proper

6th The cases where there will probably an appeal to Justice per

to Justice for the life of a person shd not depend on the testimony of any one person at least a Physician would not be willing to bear testimony alone when the life of a human being depended upon his decision

In Consultations chose Physicians whose principles are nearest similar your own modes of practice two modes of practice tho each may be good when separate yet when combined always do harm —

We Come now to the application of our principles

1st the effects of impression on heat-Thy excitement is to elevate it up to 60 on our scale and produce preternatural excitability

2 Debility from action is produced by longer application of impressions The scale is now at 40 if you abstract impression the effect is the same viz Debility

3d Depression the system is now at 30 these states of the system are attended with accumulated excitability if the impression set suddenly

4th Disease or morbid excitement is produced by a still larger application of impression but if these impressions set suddenly both excitement and excitability are worn down and no disease is produced

5 Oppression or suppressed excitement the system is now at 20

6 Prostration the excitability is now exausted and the system cannot react new and ~~different stim~~ different stimuli are now to be used to raise the excitability which is now latent and is as it were envelopped and will not emit the motion of life

7th Disorder

A Death when debility is suddenly induced it is attended with accumulated excitability and should be treated with low diet rest sem- the medicines ~~can~~ & But when debility is induced gradually we must gently stimulate

Elevation shew itself in alacrity wakefulness and an increase of appetite

Depression is sometimes followed by a tendency to disease in this case depletion should be used but when there appears to be no tendency to disease stimuli should be used we must equalize excitement and divert it from vital parts by depletion or stimuli

Pg

Medicines have been divided into sedatives and stimulants the

1st ~~clas~~ Sedatives act by abstracting and reducing morbid excitement

2d Stimulants act by equalizing excitement and by creating a new action by diverting it from parts more essential to life to ~~which~~ those not so much ~~so~~ by rendering it natural

Sedatives are divided into direct and indirect Those which act direct by lessening stimuli and abstracting morbid excitement are

1st Blood letting

2d Cold whether by air water or Ice when the system is above 98 and the skin dry

3d Fear This reduces morbid excitement by abstracting the stimulus of courage

4th Abstinence this is of different grades

1st The Depriving from fresh animal food

2d salt meat this is not so nourishing as fresh since so great a quantity cannot be taken

~~3d The Milk~~ 3d from fish

4th from milk and saccharine matter

5th from liquid aliments of all kinds

Abstinence acts in these ways

1st By lessening the stimulus of distention of the B vessels

2d by lessening the pulse of the B vessels

3 By exciting when longer is required a new action and thereby diminishing morbid excitement The operation of abstinence is too slow in acute diseases and not to be trusted

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only in chronic cases and in those cases of debility where it increases excitability and thereby gives greater room for the action of tonics The following facts with respect to the operation tonics Abstinence should not be forgotten,

1st The Indians abstain from food previous to battle hence so few of their wounds prove mortal

2d Animals fasting for sometime before death are less disposed to putrefaction

3d We always hear fatigue better after a vegetable diet or abstinence than when we eat plentifully of animal food

5th Rest abstracts the stimuli of muscular motion

6th Darkness abstracts the stimuli of light

7th Silence This abstracts the stimulus of sound The abstraction of excitement should always be performed in a gradual manner hence the saying Natura nis perpetuatum

Here we may premise a few propositions

1st There is therefore an action of specific stimuli

2nd That stimuli act on the whole system thro a particular medium and the stomach is the great medium thro which med acts on the whole system it possesses the greatest sympathy of any of the whole body It may be compared to the regulator of a watch

3d There are medicines which act on sensibility as Mustard Camph nor &c Some which act on irritability as Digitalis and some which act on both as Opium & hemlock

4th There are medicines which enter the blood vessels

5 There are some which are deprived of their mechanical qualities by passing thro the body

6 That apparent parts of the system are capable of receiving more than one stimulant and even such as are of opposite force at the same time Thus the bowels feel Rhubarb and the bowels Bark at the same time

Those Sedatives that act immediately or indirect Sedatives are such as act on the bowels Those I shall divide into three classes

1st Lenient as Crystals of Tartar Natron Glysters which act only by their quantity castor oil Manna Vitriol with apperient salts &

2d The active as Rhubarb Jalap and Calomel

3 Drastic purges as gamboge senna mony aloes &c Cathartics are in the call

1st By a distention of the bowels of the bowels with feces for this the first class of cathartics should be used

2nd — By complaints in the head for this they should also be used very benefit

3d By congestion in any of the viscera the benefit should also be used

4th In all cases where the bowels are unable to perform their function here the Drastic are necessary

5th In all cases where the contiguous viscera are diseased for either active or Drastics are to be used

6th In all diseases of the Skin for these either Benefit or active are to be exhibited as also in plethoric habits

7 For dryness of the Skin from the excitement of the cutaneous vessels for this either benefit or active purges are to be used

8 thes For this active purges are elegd

9th For all chronical affections they are proper by lessening excitement and promoting absorption ~~and~~ this purpose either lement or drastic

10th For Obstructions of the hemorrhoidal vessels for this lement

11th For obstinate obstructions of the bowels for this either lem. or dra

Here it will be proper to remark that purgatives in a small quantity should be given to have the same effect if prematurely the system has been accustomed to the medicine as an alterative they they should be given in small doses so as to produce an unusual diarrhea when it is necessary to continue purges a great length of time they should be varied no solid food should be taken during the operation of purges and they are not so certain

If liquids be copiously given the mild purgatives induce sweat more speedily than the drastic cathartics act by their quantity and quality

Purgatives are forbidden in the following diseases

1st In diseases of weak & morbid excitement
2d In the typhus state of fever
3d In Hemorrhages from the bowels
4th In the worst stage of calculous fever

Emetics are divided into four classes prompt mild powerful & nauseating

1st Those which act promptly are tickling the throat with a feather putting a finger down the throat warm water white vitriol &c
2nd Those which act feebly but certainly are Thicac & Squill
3d Those which act powerfully

on the Stomach are antimonial
Preparations Tartar emetic Mineral &c
4th Those which act by sympathy
are Digitalis & Tobacco which but
may excite vomiting by being
moistened with brandy and ap
plied externally

Emetics are Indicated

1st in cases of swallowing large
doses of Opium or Arsenic in
these cases the first class should
be used Those prevented death
in two instances by this means

3d. In discharging bile mucus or
any indigestable matter from
the Stomach here the second
class is proper
4th in a lumped State of the
Stomach here also the 2 class

2 class should be recommended

5th In morbid diseases of the head in consequence of its sympathizing with the stomach here the second class is also to be used

6 In tumors of the remote parts of the body as buboes &c here the 2 or 3 class may be given

7th In chronical effections here 2d or 3d is proper

8th In an oppression of the lungs as in catarrh when the lungs are effected with disease the 1st should not be used in the first that is oppression the first is proper

9th In dryness of the skin here the 2d or 3d is proper

10th In the forming state of malignant and contagious fevers the second and third classes are proper here they act in two ways 1 by equalizing the excitement 2d by discharging the seeds of

disease

1st They are more powerfully effectual and less dangerous in children than in adults

In the exhibition of emetics you must observe ~~first~~

1st To give them in divided doses that they may not operate too powerfully upon your pat

2d When we want a prompt effect to give as little water as possible

3d That they operate more powerfully in the morning the system at that time being in the worst state of debility and most predisposed to ~~disease~~ sickness

4th Never suffer them to operate while the body of your pat is in a recumbent posture because by these means we prevent spasm

5 That their operation is checked by a spoon full of salt in a tumbler of water also by laudanum

Emetics are forbidden

1 In violent inflammation of the head
2 In the two feeble action of the heart
3 In advanced stages of pregnancy
4 In ruptures of all kinds
5 In low chronic fevers & generally debility succeeding acute diseases

Diaphoretics increase the discharge of the vitiated humours thro the pores of the skin and act either directly or indirectly

1 Those which act directly, on the skin are Pediluvia baths of warm water and vapour
2 Those which act indirectly and produce their effects by increasing the action of the heart and arteries and thereby produce sweat as exercise cold water in a two fold manner 1 by reducing the immediate action of the capillaries to the sweating point

when they are above and
2d by the reaction of the skin when it is below the freezing point
Diaphoretics act on the capillary vessels indirectly thro the medium of the stomach
1st By nauseating as Tartar antimonia &c
2d Without nauseating such cold water when the capillary vessels are above the freezing point these act on the skin by contiguous sympathy
Diaphoretics act
1st When the capillaries are above the freezing point by diminishing the excitement directly
2d When they are below by increasing it either directly or indirectly
3d By their action being determined to the surface

of the body as Vomes powder
vinegar ascent Spirits Camphorum

4th by the stimulus of this tention
produced by warm liquids of
every kind especially each of
these methods is often necessary
and often indicated

1st To discharge this case from
the blood the miasmata arising
in fever often attempts to escape
thro the capillaries of the skin
I have heard of a young man
in who the syphilis went off
thro the skin capillaries
The poisons sometimes escapes
thro the skin from the
blood by means of the diaphoretics

2 They are indicated when the
symptoms are so mild as not
to require V.S.

3 In cutaneous diseases as herpes
pustular gout &c

when they effect only the limbs
Here I take notice that diseases
are called centrifugal when
they effect the extremities or limbs
and centripetal when they
effect the body only as Colic &
Dysentery

4th In Thoracical effections when
the symptoms are below the
sweating point

5 In fevers when there is a ten
dency to sweat excessive
sweating is sometimes hurtful

The following Rules should be
observed in the application of
diaphoretics

1st Perspiration is most easily
induced in bed to excite
it a flannel shd be worn
next the skin more perspi
ration in a hour than 12 out of
bed

2d Subdivided meal for the stomach alternately full and empty is impenetrable to perspiration

3d Great attention should be paid to the heat of the body because sweat cannot be induced with safety when the heat of the body is above 180 of Fat Therm.

4th The temperature of the drink should be warm when the heat of the body is below 180 and cold when above the same point

~~5th They should be suspended~~

5th Diaphoretics should be regulated according to the state of the disease and pulse

6 They should be suspended occasionally and used moderately least exaustion should take place

7th Care should be taken to have the bed clothes and linen often changed because sweat

sweat is very often crushed by a stiff shirt

4th It is common to give antimony emetics in cases of redundent fluids but this practice is improper unless in cases of poison when it ought to be done

4th Guard against cold and ~~sweat~~ avoid purging and blistering when you use diaphoretics unless the urgency of the case require them

Diaphoretics are forbidden

1st In highly inflamatory cases

2d In cases of weak morbid action

3d When they weaken without relieving pain they also do harm

4th In typhus fever a moist skin only is proper for this state of the system

Diuretics are medicines which increase the secretion of urine and are

1st Cold air applied to the body when a little heated going into a cellar and up stairs hearing a stream of liquid running cold water applied to the body clysters beer onions applied to the pubis These I call external diuretics

2 Diluting drinks as mellon seed tea also white carrots and parsley seed tea Dr Cadwallader cured a patient of dropsy by means of parsley seed tea after tapping had failed This class I call diluents

3d Those which act on the kidneys by sympathy of the stomach such as salt of tartar vegetable acid preparations of iron and &c

Diuretics are forbidden when there is an inflammation of the kidneys

Sialagogues or evacuants and revulsents revulsents & evacuants act first by discharging fluids contiguous to the salivary glands such as Galbach angelica &c
2d By discharging fluids from the whole body in the form of saliva as mercury arsenic acetate of lead &c Mercury acts both as an evacuant and revulsent it is one of the most powerful articles of the materia medica yet its operation is disagreeable and loathsome It has been said that mercury is not any ~~an unnatural but an do loathsome~~ ~~but~~ a disagreeable and loathsome remedy but an unnatural one but this is not the case for Mercury is the first medicine of nature if we admit that sore mouth and aphthae the 1st diseases of children for mercury

mercury produces the same effects hence when children sleep much the gossips say they are sleeping for a sore mouth and if examined at this time they will be found to have a fever & determination to the mouth and throat of children is frequently one of the diseases of childhood or rather the attempt of nature to cure a disease as scarlatina anginosa croup ~~&c~~ Tracheitis &c In adults phenomenon salivation sometimes accompanies fevers as also in the small pox is generally a favourable symptom Death frequently follows this salutary ~~evacuation~~ and useful remedy if it be suddenly suppressed If a cough & salivation attended pat with the yellow fever they generally

 recovered

Dr Sydenham mentions a malignant fever of 1676 & 78 being cured by a spontaneous salivation ~~A sudden~~ A spontaneous salivation has suddenly cured the dysentery and gout a shutting seems in mania which was called by the old writers

It marked the favourable termination of exhaustion fevers It is therefore strange that it has not been used long in these cases That we do not always excite it when useful & that we do not destroy life as nature does in ulcers Malignant sore throat &c

Auxiliries to excite salivation are 1 Vi. 2 low diet 2 Cosmetics 4 Opium this assists by inducing coffee enemas & cold bath Dr Cumming used cold bath in St Kitts to assist the operation of

operation of mercury ~~in~~ I have used that as well as other cold applications Dr Bloomfield used the cold shower bath and the partial cold bath to assist the operation of mercury

Dr tells us that mercury acts sooner in moist weather

6th Mercury is greatly assisted by being combined with Tobacco in producing salivation

7th With antimonial powders

8th With jalapin & mercurial ointment

9th Rebaled or mercurialized mercury to be gained with calomel & Gum Sulp. pulpon when we wish to give calomel secretly we may put it on bread and butter and induce the pat to eat it It is not necessary in order to produce a secretion that a profuse salivation be induced or even

a Ptialism and in some cases not even a soreness of the gums

For Restraining a salivation
Vs. Purges Blisters Oil and Barex
held in the mouth have been used
In Phila. & Mercury salivates are
out of pain in the west Indies
11 out of 12 in the yellow fever
this must be owing to a less
morbid action existing in the
Viscera of the West Indies than
in Pennsylvania a salivation is
indicated
1st The Malignant and such other
fevers as are not remarked by other
means the morbid action of
the head lungs liver spleen
Kidneys &c
3d The Diarrhea & Dysentery
4th - Syphilis
5th The visceral obstructions
& the old ulcers both external
and internal which have re
sisted the power of other means

7th In convulsive diseases or Tetanus &c

Salivation is forbidden

1st In highly excited states of fever
2. " In low and exhausted states, &c
3. " In children under 6 years of age
4th In persons above 60
5th In those having many old decayed teeth
6th In diseases tending rapidly to a crisis Mercury will never produce gangrene when the system is sufficiently relaxed or after salivation has taken place

It is to be regretted that mercury is such a loathsome remedy but man first sinned with his mouth and to his mouth must medicine be administered to remove that sin

Errhines act by depleting from the nose and are of two kinds

1st Those which ~~increase~~ deplete from the nose without inducing sneezing as Sal ammoniac Tuphith min &c

2d Those which deplete from the nose and induce sneezing as Tobacco &c

Expectorants are

1st Demulcents flax seed tea and Horse radish tea &c

2d Emetics or nauseating med. such as Squills

3d Val Alk Salts smoke of Tar Beeswax Benzin &c

Expectorants are indicated in catarrh Pneumonia Phthisis Bronchitis &c here the third class should be used as also in weak morbid action of the lungs, here the 3d class is required

Emmenogogues according to the action of the system The diseases of great morbid action Vi. should be used and they refrained from but in cases of weak morbid action calyhistics and exercise should be used For they cases in stage cases I have generally used steel which I believe only fails when given in improper doses and madder are scarcely worth our notice as emmenogogues

Blisters act

1st slowly as cantharides
2 Suddenly as boiling water

They are indicated

1 In general diseases here the 1st bleeding is to be used
2 In local congestions of the head bowels &c here also the first bleeding should be used

Minneapolis, according to the action of the City Council, the Minutes of Last Meeting were read & approved.

Mr. Lee presented a letter from Mr. Wm. Dunn, Jr. Mr. Lee moved that the Clerk be instructed to write Mr. Dunn that the Council have no power to grant the request contained in his letter of March 1st, 1867, relative to the Water Power at the Falls of St. Anthony, but that the City Clerk be instructed to write Mr. Dunn that the Council will be willing to lease the Water Power at the Falls of St. Anthony, upon the following terms, viz:

Minutes of Minneapolis

Mr. Lee

1st Yearly in Gen. Fund
2 Yearly in Sinking Fund

Mr. Lee

1st Power will be leased
Yearly in the Sum
2 The lease commence on the
Yearly Rent be paid the first
Yearly Rent to be

3 In sudden congestions here the second class should be preferred

The following rules are to be observed in the use of blisters

1st They should remain on untill they produce a serous discharge

2 When applied to the head they should remain 24 hours

3 Blisters never discharge much after the second dressing new ones should be applied if necessary

Blisters are forbidden

1st In great morbid excitement

2 In habits highly irritable and persons hable to suffer from strangury

3 In weak morbid excitement

4th In Pregnancy there appears to be a morbid action on blistering point above or below which it is improper to blister this point must be discovered by the pulse

These are medicines which lessen the quantity of fluids slowly as cauties setons perpetual blisters &c

These are indicated

1st when a gradual abstraction of morbid excitement is required

2d In local congestion

3 In cutaneous eruptions of the parts necessary for motion

These act directly or indirectly by equalizing morbid excitement and when the system has been habituated to them they should be relinquished with great caution

I have thus mentioned the remedies for diseases in an open & sensible form we come now to the second class

Stimulants These I shall divide into stimulants proper & so called or those which remove

morbid action from one part of the body by exciting it in another less essential to life & in to

Tonics which prevent the recurrence of disease by removing predisposing debility both of these act by converting excitability into excitement and when they cure without attacking any of the fluids of the body Wine and Opium are diffusible stimulants but act more or less on the whole system but not so with those stimulants that destroy irritability or morbid action by force such as corrosive acetate. Mercurialis and nitrate which resemble more the breaking down a door to get into the house than turning the key but depletion should be used in most cases in preference to such remedies altho depletion in hemorrhagic

is certainly proper yet Sugar of lead
often good when that has failed in
this case the lead acts by lessening the
excitability Consumption when cured
by Digitalis and Opium often
returns Stimuli to reduce great
morbid action act by reducing
great morbid action as labour
and exercise but in general they
do great violence to the System
and are much inferior to deple-
ting remedies They act more Sedy
in ~~measurable~~ muscular than
arterial diseases Some diseases
are however beyond the reach of
depleting remedies as Tetanus &
the morbid grades of bilious fevers
here the Opium and bark act by
prostrating the System below
the morbid action and there
by lessening excitability a ques
tion now arises when are Stim-
ulants to be used this must
be regulated by the Stage of the

stage of the disease state of the system but more particularly by the state of the pulse when they occasion heat and a frequent low pulse they are improper but if they induce none of the above symptoms but induce a fulness and slowness to the pulse they may be used with advantage and the saying that there is a time for all things, is in no thing more striking than in the manner of exibiting medc

The manner of giving stimulants in rotation I once cured a case of Tetanus 1st Wine 2 Bark 3 Opi 4th Brandy & water and then the Tonics again but more of this here after of those medc which remove disease by inducing a stronger and less diseased action

in the effected or some other part of the body of this stimulants and they should be preceded by reducing the system below Point by means of depletion but notwithstanding this holds good as a general rule yet there are two exceptions to it

1st When it is necessary to destroy irritability in Hemorrhage by sac Saturni and in other cases by digitalis

2d When we dispate excitability as in Tetanus when excitability is accumulated begin with small doses of stimuli and observe at the same time to depend the system from the stimulus of light conversation &c for they by hurrying on the system will defeat the intention of the medicine —

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In Pleurisy after bleeding once or twice it becomes to suspend the cough by Opium but when there is no accumulation of excitability begin with large doses of Stimulating medicines after depletion especially in chronic diseases and in the begining of Typhus fever when attacks excitability nearly exhausted by indirect debility do not combine too many stimulating medicines together for they generally act best in a simple form but to this there are some exceptions use them in succession and rotation for the System will often become insensible to one stimulant continued whilst another the weaker will effect it.

Liquid Laudanum may be
usefull when Opium fails & vice versa
Dr Dewitt tells us that an opiate
pill made six month well
sometimes do harm It is now
~~Dr Bell~~ that no two medicines
even of the same class produce
the same effect the stomach
will sometimes bear Quassia
and not Columbo and vice
versa Chronic diseases as In-
termittents frequently change
the place to which stimuli
are to be applied inured to
to them apply them to the
skin when still retains its
sensibility as blisters to the
abdomen In chewing Tobacca
on one side of the mouth the
side not accustomed to it is
much easier effected with it than
that which is accustomed

even snuff when taken only in one nostril that side which is habituated to it becomes more insensible to its use than the other Opium sometimes is ineffectual when taken into the stomach but by throwing it up the intestines often proves active Bark often becomes inert in the stomach but by injecting it becomes active as in the form of a bark Tacent Electricity when applied to the breast of a cock is said to rouse him and to counteract the effects produced by it on the head Opium obviates the effects of Opium when applied in a different manner from the first mode of exhibition

† Dr. R. mentions Judge Hopkinsons Wife as the person who could not hear the firing of a cannon but could distinctly hear the firing of a musket, who could not hear the loudest hollowing but could distinguish the softest notes of Musick, could not hear the beating of a Drum but could distinctly hear the thrust of a pin thro. a piece of paper —

Mercury Christies the effects of mercury but the practice is not safe having admitted that those were specific stimuli we are obliged to admit an indefinite number of them But those when are feible from the various changes of the irritability of the system as emetics when the stomach has lost its sensibility is merely because its muscular fibers do not vibrate in unison with the medicine weake stimuli some times act when strong fail strong purges destroy the contractile power of the stomach whereas weak ones assist in recovering that power. I once saw a person who could not hear the firing the firing of a cannon but could distinctly hear the pushing of a pin

a pin thro a paper I also knew
a Gentleman effected with he
mephidesia who did not feel
a pin when pushed into the
effected ~~part~~ side but was im-
mediately effected with con
vulsions by touching it In all
chronic Cases of bowel ants should
be given in the morning for
at this time the excitability
is more accumulated Baron
Hamholt says there is a cer-
tain relation such exist ch
between the ~~stimulent~~ stimuli
according as they are given in
succession Alkali for instance
will restore the excitability of
the stomach when disolved by
acids but acids will not when
disolved by ~~acids~~ Alkalies does
the Alkali act by exciting the
Moment peristaltic of the stomach

pacity of the Stomach

Medicines which remove morbid action in a part by exciting it in another less essential to life many Physicians do this without knowing A headach is cured by a diarrhea natural Hemorrhages by the morbid action in the viscera by blisters Dropsies by Diuretics acting on the Kidnies morbid action of the lungs by emetics acting on the Stomach Apoplexy by-

The morbid action being thus transferred Dr Hartly tells us he gave a dog Nux vomica and then severely whipped him and that the nux vomica had not the least effect upon him owing to the impression of the Skin predominating over that of the Stomach observe that there is but one impression felt at the

among those of original force
and that is the strongest
1st You must reduce the morbid
action below the stimulating
point so that the medicine
may at once predominate
over the remaining morbid
action & repeate it again then
use exciting depleting blister
ing and sweating paints &c
which is as necessary for the
Physician to know as that the
Mariner should know the signs
when discover a point
To be ~~part~~ notice that the part in
in which you excite morbid
action ~~is in such~~ be less essential
to life than the part from which
you attempt to remove it to this
There are three exceptions
1st In convulsions & Epilepsie dele-
rium has been induced by Opi
with advantage

2d Tetanus is often cured by Rhumpenness

3d In Pleurisy it is most essential to apply blisters to the effected part and in fever it is some times necessary to bring on hunger to such a degree as to endanger life in order to accumulate excitability in the stomach

By To prevent unsuccessful practice enquire into the ~~pot habitual~~ peculiarities of the pot habitual diseases but in dangerous diseases little attention is necessary to the effect of Med:

4 When the second morbid action which has been excited becomes languid a third must be excited for pain from habit becomes Pleasurable

5th Attend to association in disease for instance we shun to

Stimulate the feet in gout because they are more predisposed to the disease
In Stimulents I include the passions as anger & terror but the agreeable passions more frequently cure diseases by preponderating over painful impression
I knew a man who could relieve himself at pleasure by shaving pronouncing particular names words or events sometimes return pain fever and death these same times wonderful effect in curing disease

Medicines which prevent the recurrence of disease by removing and preventing debility these I shall call Tonics and the rules necessary to be observed in their exhibition are the following

1st If they are always to be exhibit
all in doses less than are necessary
sufficient to remove the morbid
action

2 For the choice of your Tonics
always prefer such as are of a
durable operation as aliment
in the use of which observe the
following rules

1 always prefer that which is
agreeable to the taste and stom-
ach altho there should be
no appetite still continue
to give the aliment for who
would wait for an appetite
to give medicine

2d Recommend to a debilitated
person to use them 4 or 6 times
a day and once or twice at
Night if sleepless for the
stomach of a debilitated person is
like a school boy if he be idle
will do mischief

a full meal however when debilitated should be avoided

3 Accommodate the diet to the excitability of the system solid food should be preferred for it makes the most flesh while liquids make the most fat.

5 The less nourishing is preferable to that which is more so in diseases of debility salt meat is preferable to that which is fresh on this account

6th There are cases where only one kind of food is required

A Gentleman of this city was affected with violent stomach complaints was cured by the use of boiled turnips alone Boiled carrots are said to cure the asthma bread and milk the plant a diet solely of fish has cured certain inflammatory diseases

The stomach prefers a Homogeneous food Beef, Mutton have cured Dyspepsia and Oysters increased obstructions

7th A diet of the same aliment given by weight and Measure has cured diseases A tey boi was cured of Epilepsia by feeding upon the milk of a cow which was fed on grass ~~on~~ in the summer and hay in the winter but his disorder always returned when he used the milk of a cow which was fed on grain

8 Uniform hours in eating are strictly necessary the farmer after leaving an bed the better

Tonic drinks comprehend these kinds as 1st malt liquor

2d Opperent Kinds of wine as Medeira Sherry -
3 Less wines as Malaga Port Cherry Bargne and Cider you see I do not include ardent Spirits for a man had better die than use this detestable Economian remedy In chronic cases they are always injurious as their use will generally create an attachment to them which when confirmed by habit cannot be eradicated

4th Cold and warm bath removes debility and disease of weak morbid action The warm bath should be used between 12 and 1 O clock only The Temperature of the cold bath should be (between) from 32 to 65 the cool from 65 to 85 the tepid from 85 to 96 warm from 96 to 108 hot 108 to 110 Fat Ther
The warm bath is very much used in Italy The cold bath acts indirectly as a tonic

aby producing heat and accumulated excitability in to excitement to be more effectual it should be used after the warm bath I shall now make a few observations on the cold bath

1st It should be preceded by the warm

2d It should be temperate when the water is cold it should be warmed and vice versa

3 It should be used 2 3 or 4 times a day

4 In a warm room during the winter

5 Exercise and friction should succeed

5 Exercise held a high rank among the class of tonics or obviating simple debility and may be divided into active and passive

The former includes walking dancing

The latter includes friction rocking in a cradle chamber horse swinging & riding on horseback is partly active & partly passive

The following are the rules to be observed in using exercise 1

1st In great debility begin first with the passive or friction the effects of which in overcoming debility is wonderful it increases the action of the blood vessels also the muscles and secretion as well as sensation The changes are remarkable by this remedy and carry it so far as to have proposed practices as we have ~~barbers~~ barbers The exercise of the hands in shuttle cock the good effects of this we see ~~in~~ clearly in Foy boy shoemakers ladies &c swinging sailing and riding are the next stages of exercise as they occur in the open air swinging is good when the pt is unable to take the other kinds of exercise It was recommended in consumption by Drs Hay garth & Smith

I cured one case of this disease completely swinging sailing &c It creates a disease in the stomach and thereby carries off the seeds & effects of the primary disease it also keeps up a continued conflict between the passions & reason generally when the vessels are kept clean The Balloon used formerly only in time of war may yet come to be used in cases of debility partial exercise as before observed removes debility a person a person held one hand in water at 62 and when it could be raised to 64 by the heat of the hand by exercising with the other it was raised to 64 Riding on horse back is highly recommended in consumption it expends less excitability than walking women may be used in cases where it is necessary to expend much excitability

2d Avoid all fatigue
3 Accommodate exercise to the state of debility
4th The same rule may be observed in exercise as in that of eating not to take too much at a time as to render you unable to take more immediately afterwards without injury Pat.s are often in this respect ungovernable
5th Exercise should never be prescribed before breakfast or immediately after a meal different kinds of exercise suit different kinds of disease as exercising the muscles of the back in Nephritis
6th Debility is to be removed by a change of occupation
7th Travelling is a great exercise from the stimulus which attends it and change of air and succession of new objects

8d Changes of climate and former associations are useful in removing ~~the~~ nervous diseases as Hypochondriasis Hysteria Epilepsy Stone and even convulsions are cured by it These are unmoved by change of climate and men pass from their times by it especially the old when they change from a cold to a warm climate

9th An unbarm climate far unweldes the Apperent from that which they have been accustomed will be of considerable service in certain cases of debility a warm room from 72 to 78 Degrees and dry should be used and in order to keep the room from being too warm a vessel of water should be kept on the stove which will evaporate at a certain degree and thereby cool the room by its vapour 112

10 Change of diet and manner is frequently of great service

11 Cheerful and agreeable company ~~books~~ with interesting company books obviate debility

12 Advise convalescence to go to bed early at a stated hour and to observe the same rule strictly in getting up in the morning

13 Strictly forbid their going into the bright air on moist weather as also the gratifying of the venereal appetite

14th Accommodate their dress to the weather Their dress had better be three degrees too hot than one too cold it should be loose and without ligatures flannel should be next the skin they should sleep between blankets

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